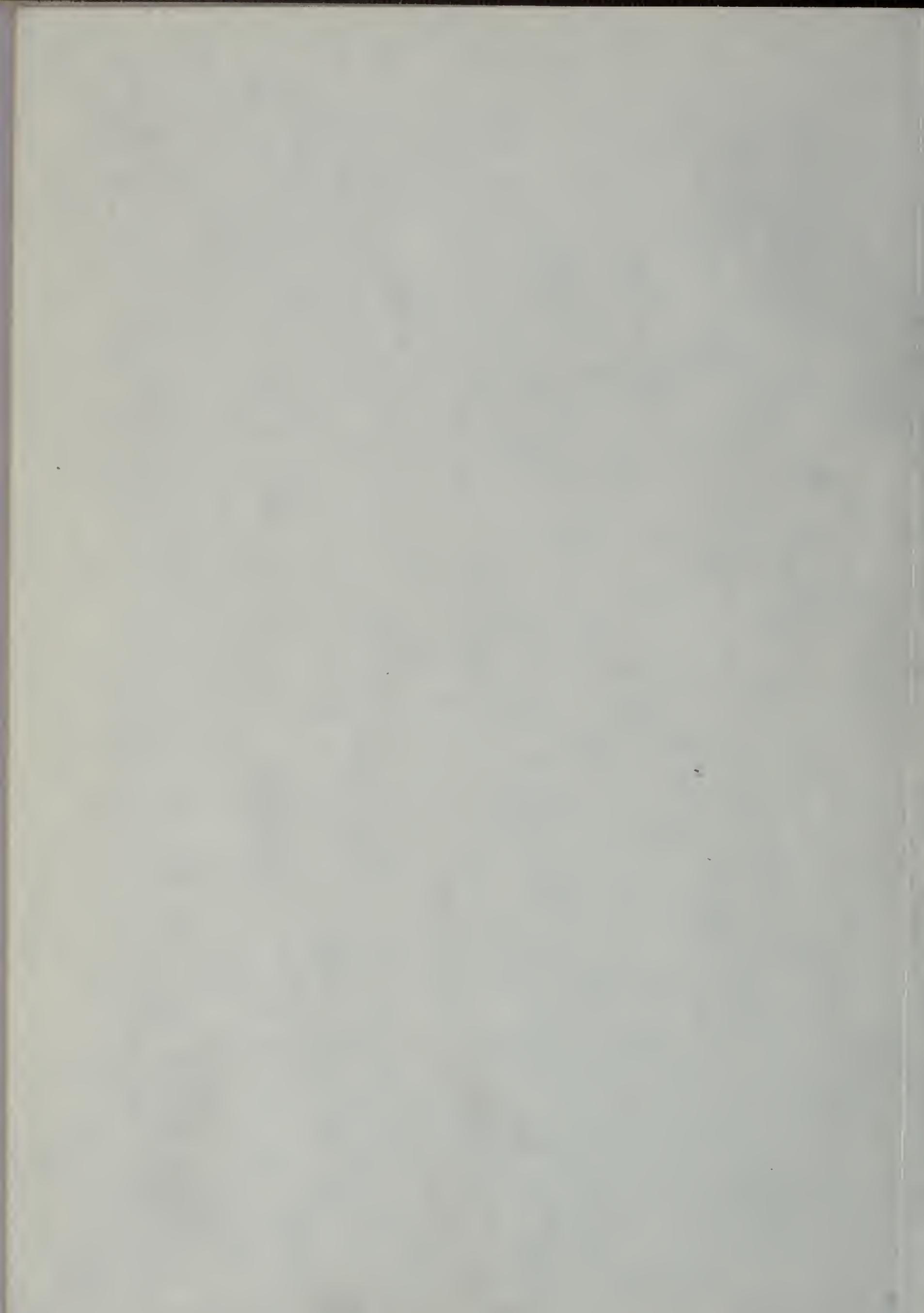


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5
BULLETIN No. 130-73

HYDROLOGIC DATA: 1973

Volume I: NORTH COASTAL AREA

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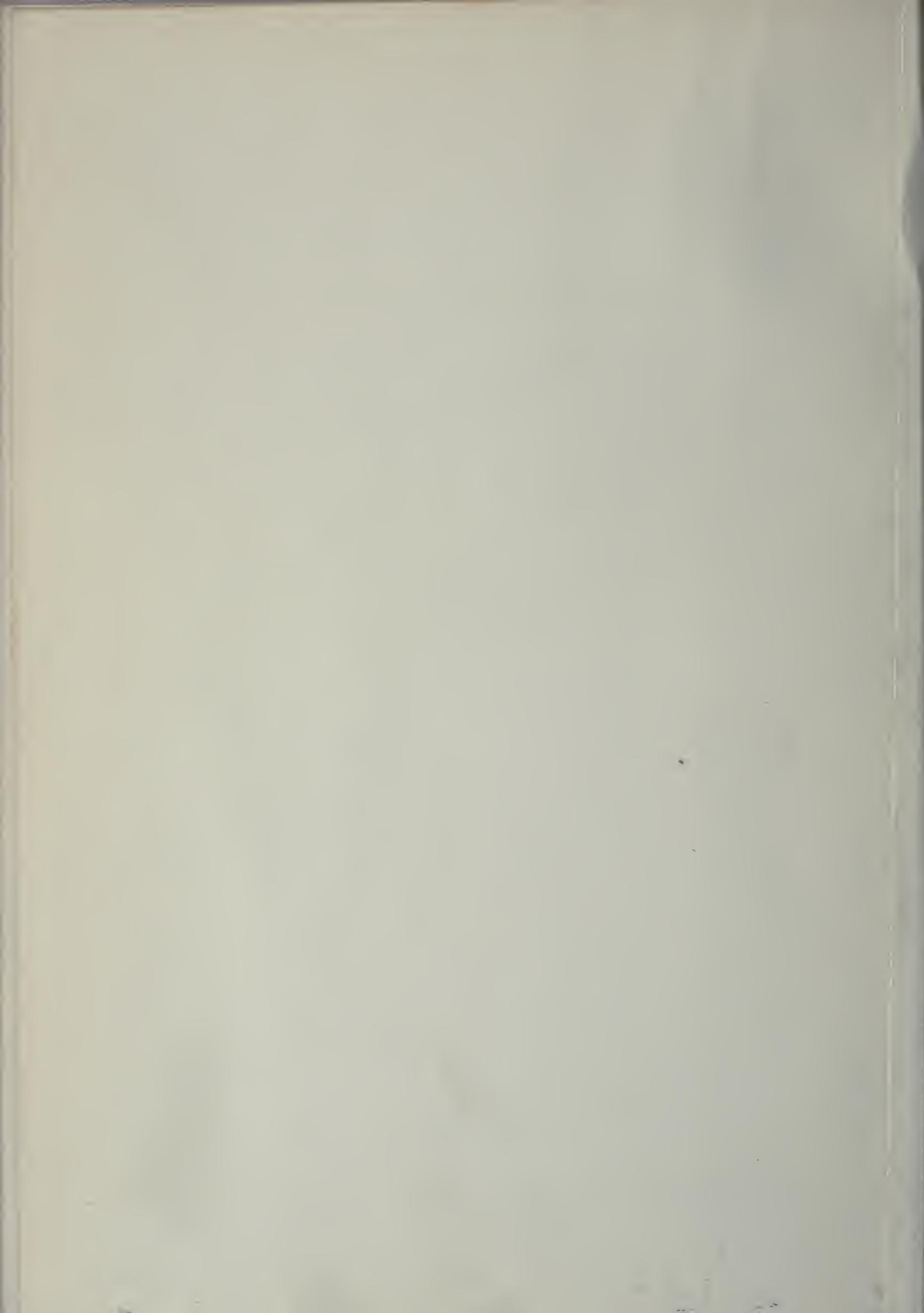
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BULLETIN No. 130-73

HYDROLOGIC DATA: 1973

Volume I: NORTH COASTAL AREA

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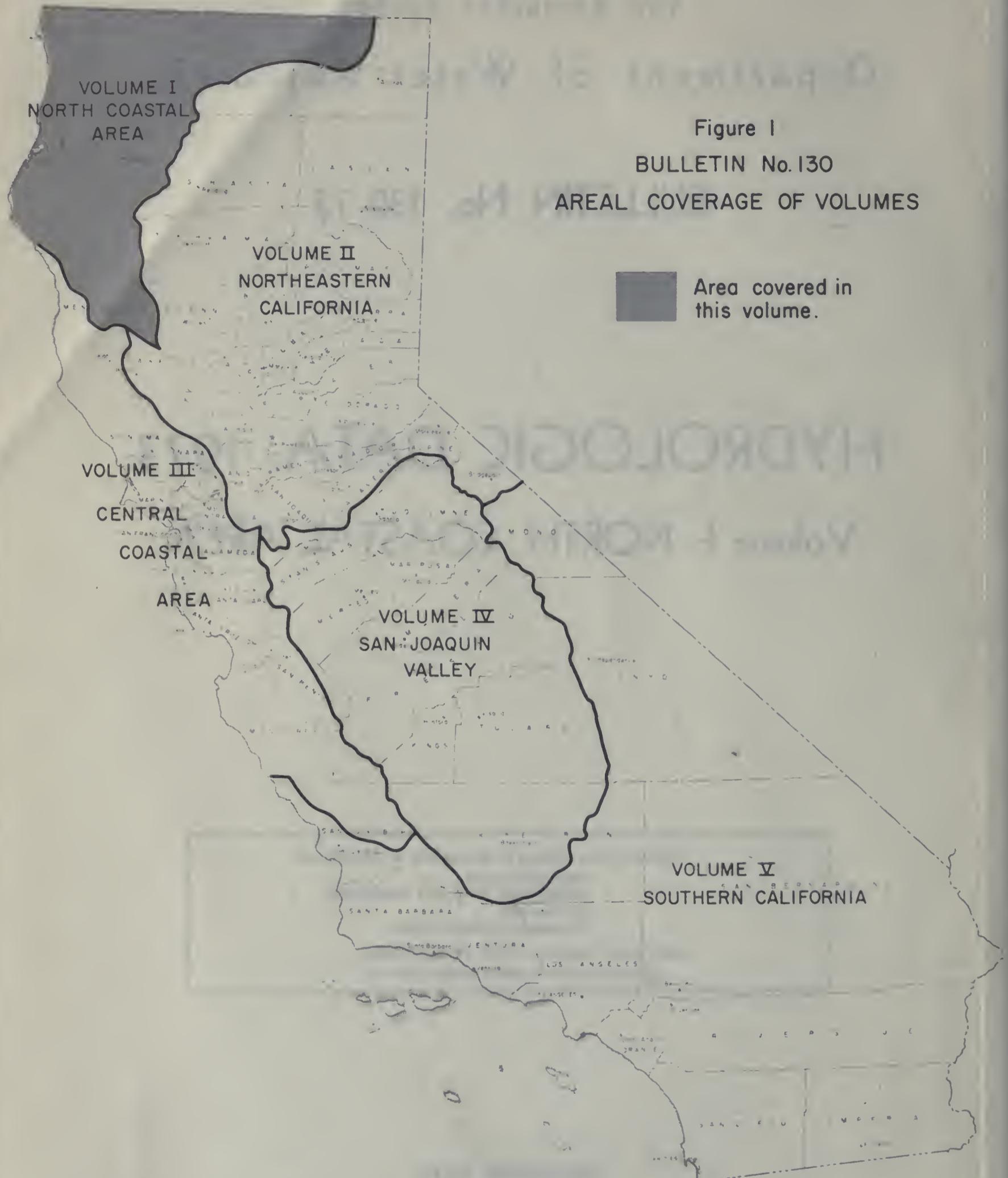
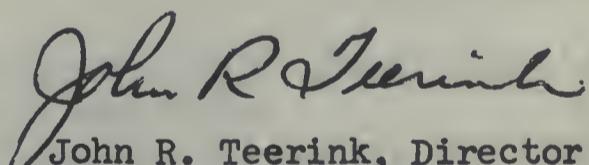


Figure 1
BULLETIN No. 130
AREAL COVERAGE OF VOLUMES

FOREWORD

The hydrologic data programs of the Department of Water Resources supplement the data collection activities of other agencies and help satisfy the needs for data on the quality and quantity of water in the State. Bulletin No. 130-73 presents accurate, comprehensive, and timely hydrologic data which provide a more complete knowledge of the factors affecting our environment and are prerequisites for effective planning and operation of water facilities.

The Bulletin No. 130 series is published annually in five volumes. Each volume presents hydrologic data for one of five reporting areas of the State. These areas are delineated on the map on the opposite page.



John R. Teerink,
Director
Department of Water Resources
The Resources Agency
State of California
October 4, 1974

METRIC CONVERSION TABLE

| <u>English Unit</u> | | <u>Equivalent Metric Unit</u> |
|---|--|-------------------------------|
| Inch (in.) | 2.54 | Centimeters |
| Foot (ft.) | 0.3048 | Meter |
| Mile (mi.) | 1.609 | Kilometers |
| Acre | 0.405 | Hectare |
| Square mile (sq. mi.) | 2.590 | Square kilometer |
| U. S. gallon (gal.) | 3.785 | Liters |
| Acre-foot (acre-ft.) | 1,233.5 | Cubic meters |
| U. S. gallon per minute (gpm) | 0.0631 | Liter per second |
| Cubic feet per second (cfs) | 1.7 | Cubic meters per minute |
| Degrees Fahrenheit ($^{\circ}\text{F}$) | Degrees Celsius or Degrees Centigrade ($^{\circ}\text{C}$) = $(^{\circ}\text{F} - 32) \cdot \frac{5}{9}$ | |

WATER QUALITY CONVERSION TABLE

| <u>Weight Per Weight</u> | <u>Equivalent Weight Per Volume</u> |
|------------------------------|-------------------------------------|
| Part per million (ppm) | Milligram per liter (mg/l) |
| Part per billion (ppb) | Microgram per liter (ug/l) |
| Part per trillion (ppt) | Nanogram per liter (ng/l) |
| Equivalent per million (epm) | Milliequivalent per liter (me/l) |

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| APPENDIX F: WASTE WATER DATA, which appeared in certain volumes of the Bulletin No. 130 series, has been discontinued. For information regarding waste water, the reader is referred to the recently reactivated Bulletin No. 68 series: "Inventory of Waste Water Production and Waste Water Reclamation Practices in California". | |

ABSTRACT

The report contains tables showing data on surface water flow, ground water levels, and surface and ground water quality in the North Coastal area during the 1972-73 water year. Figures show the location of climatological stations, surface water measurement stations, surface water sampling stations, and ground water basins.

ACKNOWLEDGMENTS

Valuable assistance and contributions were received from several agencies and many private cooperators. The cooperation of the National Weather Service (formerly the U. S. Weather Bureau) and the U. S. Geological Survey was particularly helpful and is gratefully appreciated.

A special note of thanks is extended to the many loyal and dedicated weather observers whose unselfish efforts have contributed immeasurably to our knowledge of historical weather conditions in the North Coastal area.

State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES

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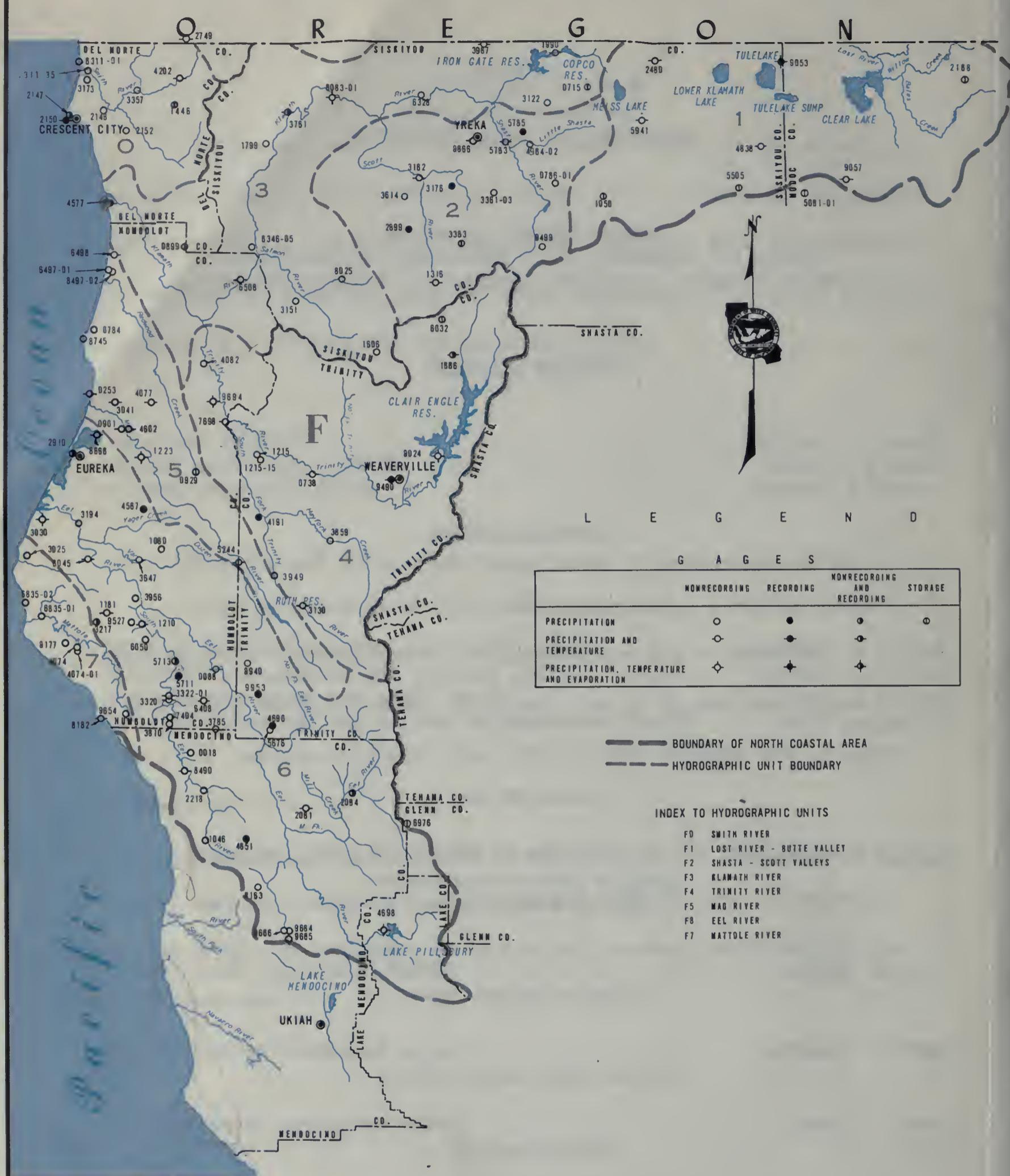
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CLIMATOLOGICAL OBSERVATION STATIONS

APPENDIX A

CLIMATOLOGICAL DATA

TABLE A-1

PRECIPITATION IN NORTH COASTAL AREA DURING WATER YEAR 1973

Table A-1 summarizes monthly precipitation totals for selected stations for the 1973 water year, October 1, 1972, through September 30, 1973. The table shows stations by assigned number, name, and county. Location is defined by latitude and longitude in degrees to the third decimal, and stations are located on the map on the preceding page.

Precipitation values are shown to the nearest hundredth (.01) of an inch. Where digital recording rain gages are used, a zero is shown in the second decimal place, even though these instruments record to only the nearest tenth (.1) of an inch. The following notations are used to qualify the values:

- No record or incomplete record
- B Record began
- E Wholly or partially estimated
- N Record ends
- T Trace, an amount too small to measure

Precipitation data collected by the National Weather Service and local observers and cooperators in the North Coastal area are available in greater detail in other reports. The National Weather Service publishes a report entitled "Climatological Data for California" and a companion volume, "Hourly Precipitation Data". Department of Water Resources Bulletin No. 165, "Climatological Stations in California, 1971, Indexed by County", contains station information on both active and historical precipitation measurement stations.

In addition, evaporation data and daily climatologic data, including temperatures, together with local conditions and qualifying remarks, are available in the files of the Department of Water Resources.

The county codes (CO) used in Table A-1 are shown below:

| <u>County</u> | <u>Code</u> |
|---------------|-------------|
| Del Norte | 08 |
| Glenn | 11 |
| Humboldt | 12 |
| Lake | 17 |
| Mendocino | 23 |
| Modoc | 25 |
| Siskiyou | 47 |
| Trinity | 53 |

TABLE A-1

PRECIPITATION IN NORTH COASTAL AREA DURING WATER YEAR 1973

| CO STA NO | LAT | LONG | ELEV | STATION NAME | TOTAL | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|--|-----|------|------|--------------|--------|------|-------|-------|-------|-------|--------|------|------|------|------|--------|--------|------|
| 12 F60008800 40.183 123.600 435 ALDERPOINT | | | | | 49.13 | 3.08 | 6.78 | 7.09 | 14.01 | 8.58 | 5.56 | 1.31 | .31 | .00 | 0.00 | 0.00 | T2.39 | |
| 12 F50025300 40.971 124.089 217 ARCATA A P | | | | | 43.13 | 1.81 | 5.26 | 9.34 | 8.29 | 4.18 | 7.46 | 1.07 | 1.33 | .84 | 0.04 | 0.07 | 3.4 | |
| 53 F40073800 40.748 123.244 1270 BIG RAR RANGER STA | | | | | 29.96 | 1.71 | 4.70 | 4.04 | 7.58 | 5.12 | 3.21 | .85 | .50 | .04 | 0.14 | 0.00 | 2.07 | |
| 47 F20078601 41.591 122.328 2955 BIG SPRINGS 4 E | | | | | 6.11 | .30 | .36 | 1.17 | .55 | .25 | .81 | .34 | 1.12 | .00 | 0.12 | 0.00 | 1.09 | |
| 23 F60104600 39.686 123.660 1480 BRANSCOMA 2 NW | | | | | 83.50 | 2.58 | 12.39 | 16.18 | 23.54 | 12.49 | 9.25 | 1.55 | .64 | .02 | 0.00 | 0.04 | 4.82 | |
| 12 F70107040 40.108 123.028 BRICELAND - WOLF | | | | | .00- | 3.03 | 11.58 | 18.67 | 24.60 | 12.03 | 9.62 | 1.28 | .64 | .00 | 0.00 | 0.00 | -0.00- | |
| 12 F60108000 40.516 123.816 2050 BRIDGEVILLE 4 NW | | | | | 58.14 | 3.01 | 8.82 | 9.81 | 12.96 | 8.58 | 8.01 | 2.30 | .80 | .00 | 0.00 | 0.00 | T3.85 | |
| F60108400 | | | | | 48.60 | 2.50 | 7.60 | 7.88 | 10.00 | 8.30 | 7.70 | 1.00 | .80 | .00 | 0.00 | 0.00 | 2.70 | |
| 12 F60118100 40.350 124.108 410 BULL CREEK | | | | | 57.77 | 3.36 | 10.30 | 11.91 | 8.38 | 14.19 | 8.51 | .68 | .43 | .07 | 0.00 | 0.02 | 0.00 | |
| 12 F60121000 40.309 123.906 200 BURLINGTON ST PARK | | | | | .00- | 3.45 | 8.76 | 12.25 | 14.04 | 10.34 | .00- | .00- | .30 | .00 | 0.00 | -0.00- | 3.43 | |
| 53 F40121500 40.796 123.479 2150 BURNT RANCH 15 | | | | | 40.49 | 2.08 | 4.74 | 8.16 | 9.42 | 7.35 | 5.37 | 1.20 | .39 | .09 | 0.07 | 0.02 | 2.10 | |
| 12 F50123300 40.766 123.900 420 BUTLFA VALLEY RANCH | | | | | 48.79 | 2.62 | 6.90 | 9.56 | 9.09 | 5.93 | 7.89 | 1.98 | .94 | .32 | 0.00 | 0.02 | 3.54 | |
| 47 F20131600 41.300 122.800 3136 CALLAHAN RANGER STA | | | | | 13.40 | .89 | 2.08 | 2.77 | 2.57 | 2.73 | .49 | .12 | .00 | 0.00 | 0.00 | T1.11 | | |
| 47 F30160600 41.100 123.050 2980 CFCILVILLE 5 SE | | | | | 28.43 | 1.80 | 3.40 | 7.50 | 5.94 | 3.11 | 2.07 | .96 | .69 | .03 | 0.72 | 0.00 | 2.21 | |
| 47 F30179900 41.708 123.648 975 CLFAP CREEK | | | | | 46.93 | 1.31 | 6.41 | 12.60 | 12.67 | 4.68 | 5.20 | .88 | .35 | .05 | 0.00 | 0.00 | 2.78 | |
| 53 F40188600 41.083 122.700 2500 COFFE CREEK HS | | | | | .00- | 4.40 | 11.00 | 7.30 | .00- | .00- | 5.30 | .60 | .10 | .00 | 0.20 | 0.00 | -2.10 | |
| 47 F30199000 41.983 122.333 2700 COPCO DAM NO 1 | | | | | 12.58 | 1.00 | 1.01 | 3.24 | 1.93 | .97 | 1.57 | .64 | .98 | .04 | 0.03 | 0.02 | 1.15 | |
| 23 F60208100 39.783 123.250 1385 COVELO | | | | | 42.51 | 2.16 | 6.19 | 8.39 | 12.59 | 6.27 | 4.59 | 1.01 | .12 | .00 | 0.00 | 0.00 | 1.19 | |
| 23 F60208400 39.833 123.083 1514 COVELO EEL RIVER RS | | | | | .00- | 1.44 | 6.65 | 3.87 | .00- | 5.40 | 4.40 | .50 | .20 | .00 | 0.00 | 0.00 | 0.00- | |
| 08 F60214700 41.766 124.200 40 CRESCENT CITY 1 N | | | | | 54.97 | 2.18 | 6.19 | 14.40 | 9.60 | 5.38 | 9.26 | 1.65 | 1.93 | .62 | 0.00 | 0.00 | T0.20 | 3.54 |
| 08 F60214800 41.800 124.083 120 CRESCENT CITY 7 ENF | | | | | 67.52 | 2.45 | 7.22 | 14.58 | 13.91 | 6.80 | 11.77 | 2.09 | 2.18 | .84 | 0.03 | 0.04 | 5.61 | |
| 08 F60215000 41.766 124.200 50 CRESCENT CITY HMS | | | | | 55.30 | 1.90 | 6.50 | 11.90 | 10.50 | 6.30 | 10.20 | 1.10 | 2.30 | .70 | 0.00 | 0.20 | 3.70 | |
| 08 F60215200 41.755 123.991 360 CRESCENT CITY 11 F | | | | | 81.62 | 3.02 | 10.18 | 19.70 | 16.72 | 7.24 | 11.36 | 2.32 | 2.31 | .74 | 0.00 | 0.00 | 8.03 | |
| 08 F60215375 41.783 124.050 CRESCENT CITY SELIG | | | | | .00- | 2.45 | 7.48 | 15.10 | 14.78 | 7.40 | 12.59 | 1.45 | 2.42 | .00 | 0.00 | -0.00- | 0.00- | |
| 23 F60221800 39.833 123.673 1270 CUMMINGS | | | | | 75.94 | 2.84 | 11.00 | 14.27 | 20.02 | 12.99 | 8.91 | 1.18 | .52 | .03 | 0.00 | 0.30 | 3.48 | |
| 47 F10248000 41.955 121.908 4240 DOPIRS INSPECT STA | | | | | 8.42 | .89 | .82 | 1.96 | .87 | .60 | .62 | .59 | 1.03 | .04 | 0.20 | 0.04 | 0.83 | |
| 23 F60249030 39.700 123.394 DOS PIOS RAHNSFN | | | | | .00- | 3.65 | 11.12 | 11.62 | 17.04 | 10.70 | 5.45 | .96 | .54 | .00 | 0.00 | -0.00- | 0.00- | |
| 08 F60274900 42.000 123.716 1711 FLK VALLEY | | | | | 73.90 | 3.18 | 9.34 | 18.46 | 16.05 | 5.01 | 10.10 | 2.67 | 1.23 | .55 | 0.00 | 0.07 | 7.29 | |
| 47 F202H9900 41.466 122.300 2912 FTNA | | | | | 19.39 | .84 | 1.95 | 6.29 | 4.53 | 1.74 | 1.18 | .54 | .17 | .01 | 0.00 | 0.00 | 2.14 | |
| 12 F60291000 40.800 124.166 43 FUREKA WR CITY | | | | | 36.08 | 1.97 | 5.41 | 7.42 | 6.47 | 3.85 | 7.10 | .35 | .85 | .23 | 0.00 | T0.08 | 2.35 | |
| 12 F60303000 40.598 124.274 10 FERNDALE 2NW | | | | | 38.44 | 3.33 | 4.87 | 6.54 | 8.52 | 4.35 | 7.40 | .78 | .43 | .02 | 0.00 | 0.18 | 1.47 | |
| 12 F60304100 40.943 124.018 285 FIELDROOK 4 D RCH | | | | | 52.30 | 2.35 | 6.00 | 11.85 | 9.50 | 4.80 | 8.55 | 1.15 | 1.70 | 1.15 | 0.00 | 0.15 | 5.10 | |
| 00 F60312200 41.811 122.371 2960 FOOTHILL SCHOOL | | | | | .00- | .31 | .67 | 1.92 | 1.08 | .39 | .98 | .59 | 1.05 | .03 | 0.00 | 0.00 | 1.01 | |
| 53 F60313000 40.383 123.333 2340 FOREST GLEN | | | | | 62.43 | 2.79 | 7.70 | 13.21 | 20.07 | 9.30 | 4.68 | 1.41 | .64 | .13 | 0.00 | 0.00 | 2.50 | |
| 08 F60317300 41.866 124.150 46 FORT DICK | | | | | 63.49 | 2.39 | 7.21 | 13.54 | 12.22 | 6.85 | 10.49 | 1.77 | 2.59 | 1.06 | 0.00 | T0.25 | 5.06 | |
| 47 F20317600 41.583 122.714 3324 FORT JONES 6 ESE | | | | | 13.10 | .60 | 1.30 | 3.70 | 2.20 | 1.00 | 1.00 | .50 | .80 | .10 | 0.30 | 0.00 | 1.60 | |
| 47 F20318200 41.600 122.850 2720 FORT JONES RANGER ST | | | | | 17.54 | .66 | 1.77 | 6.15 | 4.17 | 1.28 | .66 | .78 | .34 | .00 | 0.02 | 0.00 | T1.71 | |
| 12 F60319400 40.600 124.150 60 FORTUNA | | | | | 42.61 | 3.54 | 6.01 | 6.97 | 7.90 | 5.79 | 7.77 | 1.42 | .74 | .06 | 0.00 | 0.06 | 2.35 | |
| 12 F60321700 40.306 124.065 2500 FOX CAMP | | | | | .00- | 4.33 | 13.12 | 16.00 | .00- | 16.00 | 10.60 | 1.84 | .55 | .22 | 0.00 | 0.00 | -0.00- | |
| 12 F60332000 40.100 123.800 340 GARFRVILLE | | | | | 56.78 | 2.89 | 7.75 | 10.45 | 14.83 | 10.68 | 5.55 | 1.71 | .34 | .02 | 0.00 | 0.01 | 2.55 | |
| 12 F60332201 40.100 123.794 540 GARFRVILLE HMS | | | | | 59.37 | 3.15 | 7.61 | 10.61 | 15.56 | 10.66 | 7.05 | 1.78 | .40 | .05 | 0.00 | 0.02 | 2.44 | |
| 08 F60335700 41.866 123.966 384 GASQUET RANGER STA | | | | | 72.61F | 2.74 | 8.51 | 16.73 | 14.62 | 6.80E | 11.77E | 2.10 | 1.70 | .99 | 0.00 | 0.09 | 6.47 | |
| 47 F20361400 41.550 122.900 2818 GREENVIEW | | | | | 14.11 | .78 | 1.16 | 5.44 | 3.98 | .99 | .17 | .10 | .10 | .00 | 0.00 | 0.00 | 1.35 | |
| 47 F30376100 41.800 123.383 1090 HARRY CAMP RANGER STA | | | | | 38.40 | 1.58 | 4.63 | 10.71 | 10.30 | 3.62 | 4.31 | .50 | .32 | .06 | 0.04 | 0.00 | 2.33 | |
| 23 F60379500 39.989 123.611 1910 HARRIS 7 SSE | | | | | 62.07 | 2.85 | 7.54 | 11.90 | 16.62 | 11.26 | 5.42 | 1.99 | .34 | .01 | 0.00 | 0.45 | 3.30 | |
| 47 F30398700 42.000 122.633 2900 HILTS | | | | | 15.79 | .81 | 1.62 | 4.57 | 3.27 | 1.37 | 1.33 | .59 | .63 | .02 | 0.56 | 0.00 | T1.03 | |
| 12 F70407400 40.238 124.150 380 HONYDREW 2 WSW | | | | | .00- | 4.30 | 9.74 | 12.09 | .00- | .00- | .00- | .00- | .00- | .00- | 0.00 | -0.00- | 0.00- | |
| 12 F60408200 41.050 123.666 350 HOOPA | | | | | 53.29 | 2.44 | 7.66 | 13.34 | 11.59 | 6.03 | 6.66 | .98 | .60 | .11 | 0.00 | 0.01 | 3.47 | |
| 53 F40419100 40.616 123.466 1260 HY4MP01 | | | | | 37.79 | 1.52 | 4.29 | 9.44 | 10.01 | 6.08 | 3.83 | .27 | .37 | .01 | 0.04 | 0.00 | 1.41 | |
| 08 F60420200 41.900 123.769 1250 IDLEWILD HMS | | | | | 58.35 | 2.58 | 7.48 | 13.99 | 12.41 | | | | | | | | | |

TABLE A-2

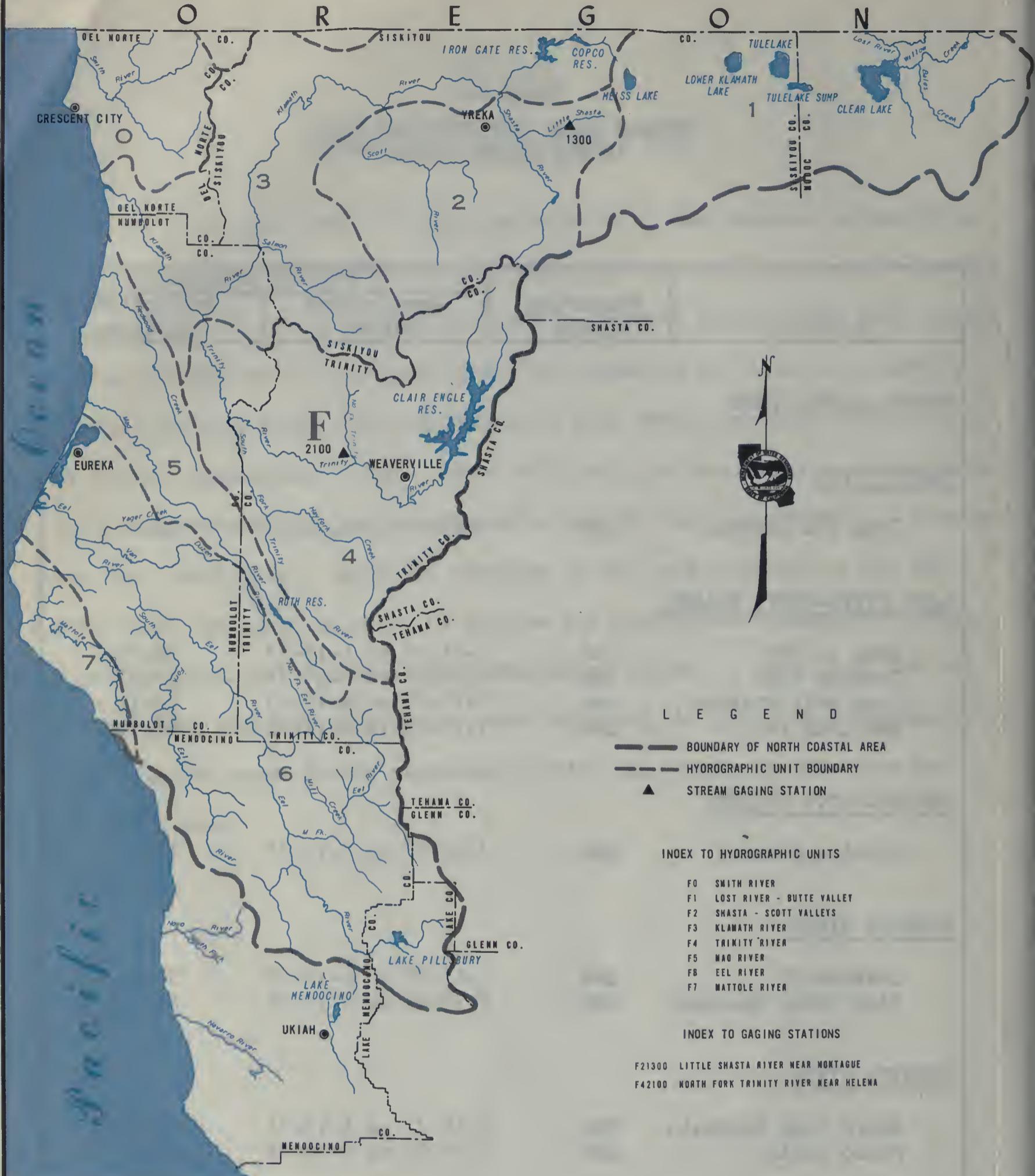
STORAGE GAGE PRECIPITATION DATA

Table A-2 lists storage gages for which the seasonal accumulation of precipitation is reported. These gages are located in the remote mountain regions where no observers are available to operate conventional rain gages. Storage precipitation gages are tanks with capacity for storing an entire year's rainfall, along with antifreeze to melt frozen precipitation and oil to prevent evaporation losses. Once each year, in the summer or early fall, the precipitation that has accumulated since the last measurement is measured and then emptied out. With the addition of the proper amount of oil and antifreeze, the gage is ready to receive the next season's amount. Although logistics preclude conducting the measurement operation exactly at the end of the water year and exactly one year following the previous measurement, data from the gages fairly accurately depict the total precipitation for the water year.

TABLE A-2
STORAGE GAGE PRECIPITATION DATA
NORTH COASTAL AREA

| Station | Measuring Agency | 1972-73 Season | | |
|---------------------------------------|------------------|--------------------|-------------------------|--|
| | | Measurement Period | Precipitation in Inches | |
| NORTH COASTAL AREA | | | | |
| <u>SMITH RIVER</u> | | | | |
| Camp Six Lookout | DWR | 7-11-72 to 6-18-73 | 77.53 | |
| <u>LOST RIVER-BUTTE VALLEY</u> | | | | |
| Bray 10 WSW | DWR | 7-11-72 to 6-19-73 | 20.75 | |
| Crowder Flat | DWR | 7-20-72 to 6-27-73 | 17.03 | |
| Long Bell Station | DWR | 7-13-72 to 6-21-73 | 25.11 | |
| Medicine Lake | DWR | 7-13-72 to 6-21-73 | 41.57 | |
| <u>SHASTA-SCOTT VALLEYS</u> | | | | |
| Gazelle Lookout | DWR | 7-12-72 to 6-19-73 | 12.33 | |
| <u>KLAMATH RIVER</u> | | | | |
| Beswick 7S | DWR | 7-11-72 to 6-19-73 | 30.81 | |
| Blue Creek Mountain | DWR | 7-10-72 to 6-17-73 | 88.82 | |
| <u>TRINITY RIVER</u> | | | | |
| Board Camp Mountain | DWR | 7-10-72 to 6-17-73 | 91.60 | |
| Mumbo Basin | DWR | 7-12-72 to 6-20-73 | 55.44 | |
| <u>EEL RIVER</u> | | | | |
| Plaskett | DWR | 7-25-72 to 6-14-73 | 65.48 | |

DWR - Department of Water Resources



SURFACE WATER MEASUREMENT STATIONS

APPENDIX B

SURFACE WATER MEASUREMENTS

This appendix presents surface water data for the 1973 water year, the period from October 1, 1972 to September 30, 1973. The data consist of summary tables of monthly and annual unimpaired runoff from four major North Coastal streams and daily mean discharges at the Department's two North Coastal area gaging stations (see Figure B-1).

In addition to data collected and published by the Department of Water Resources in this appendix, the U. S. Geological Survey collects and publishes data from many additional gaging stations for the same report area. This work is done under a federal-state cooperative contract, or through cooperative arrangements with other local or government agencies. Major exportations from the North Coastal Area, made through the U. S. Bureau of Reclamation's Judge Francis Carr Powerplant and the Pacific Gas and Electric Company's Potter Valley Powerhouse, are shown in the USGS report listed below. The data published in the following reports together with this report present a comprehensive analysis of the water resources for the area:

1. "Water Resources Data for California
Part I. Surface Water Records
Volume 1: Colorado River Basin, Southern Great
Basin, and Pacific Slope Basins excluding Central
Valley"
United States Department of the Interior, Geological
Survey
Prepared in cooperation with the California
Department of Water Resources and with other agencies.
2. Bulletin 120, "Water Conditions in California",
Fall Issue, Department of Water Resources.
3. Bulletin 157, "Index of Stream Gaging Stations in
and Adjacent to California, 1970". June 1971.
Department of Water Resources.

TABLE B-1 ANNUAL UNIMPAIRED RUNOFF

Unimpaired runoff is defined as the flow that would occur naturally at a point in a stream if there were: (1) no upstream controls such as dams or reservoirs; (2) no artificial diversions or accretions; and (3) no change in ground water storage resulting from development.

TABLE B-1
ANNUAL UNIMPAIRED RUNOFF
In Percent of Average

| WATER YEAR | KLAMATH RIVER, COPCO TO ORLEANS | SALMON RIVER AT SOMESBAR | TRINITY RIVER AT LEWISTON | EEL RIVER AT SCOTIA |
|------------|---------------------------------------|--------------------------------|---------------------------------|---------------------------|
| | Average Annual Runoff* | 4,434 | 1,225 | 1,227 |
| 1920-21 | | | 146 | 145 |
| 1921-22 | | | 64 | 69 |
| 1922-23 | | | 56 | 51 |
| 1923-24 | | | 22 | 16 |
| 1924-25 | | | 122 | 133 |
| 1925-26 | | | 66 | 61 |
| 1926-27 | | | 149 | 146 |
| 1927-28 | 86 | 89 | 86 | 86 |
| 1928-29 | 57 | 48 | 43 | 35 |
| 1929-30 | - | 63 | 66 | 65 |
| 1930-31 | 40 | 39 | 33 | 30 |
| 1931-32 | 76 | 85 | 59 | 67 |
| 1932-33 | 81 | 83 | 65 | 68 |
| 1933-34 | 49 | 47 | 56 | 46 |
| 1934-35 | 81 | 93 | 79 | 84 |
| 1935-36 | 90 | 93 | 83 | 107 |
| 1936-37 | 73 | 80 | 81 | 66 |
| 1937-38 | 179 | 182 | 171 | 200 |
| 1938-39 | 58 | 62 | 47 | 50 |
| 1939-40 | 102 | 104 | 131 | 136 |
| 1940-41 | 100 | 103 | 208 | 153 |
| 1941-42 | 104 | 108 | 147 | 138 |
| 1942-43 | 133 | 142 | 90 | 106 |
| 1943-44 | 62 | 52 | 53 | 42 |
| 1944-45 | 82 | 92 | 85 | 89 |
| 1945-46 | 117 | 124 | 115 | 112 |
| 1946-47 | 58 | 63 | 60 | 49 |
| 1947-48 | 96 | 101 | 98 | 88 |
| 1948-49 | 72 | 78 | 89 | 77 |
| 1949-50 | 92 | 96 | 70 | 77 |
| 1950-51 | 142 | 147 | 131 | 133 |
| 1951-52 | 149 | 159 | 148 | 149 |
| 1952-53 | 146 | 147 | 131 | 133 |
| 1953-54 | 138 | 131 | 129 | 129 |
| 1954-55 | 60 | 48 | 60 | 60 |
| 1955-56 | 186 | 179 | 165 | 190 |
| 1956-57 | 97 | 97 | 88 | 81 |
| 1957-58 | 184 | 184 | 219 | 217 |
| 1958-59 | 77 | 82 | 85 | 77 |
| 1959-60 | 78 | 77 | 84 | 87 |
| 1960-61 | 102 | 98 | 99 | 100 |
| 1961-62 | 74 | 78 | 85 | 73 |
| 1962-63 | 133 | 140 | 130 | 132 |
| 1963-64 | 90 | 92 | 65 | 64 |
| 1964-65 | 161 | 152 | 140 | 175 |
| 1965-66 | 101 | 91 | 110 | 96 |
| 1966-67 | 117 | 103 | 135 | 123 |
| 1967-68 | 76 | 77 | 82 | 79 |
| 1968-69 | 135 | 133 | 143 | 161 |
| 1969-70 | 143 | 130 | 130 | 139 |
| 1970-71 | 192 | 200 | 136 | 148 |
| 1971-72 | 142 | 148 | 94 | 87 |
| 1972-73** | 81 | 73 | 113 | 112 |

* Average annual unimpaired runoff in thousands of acre-feet adjusted to the 50-year period October 1920 through September 1970.

** Preliminary data subject to revision.

TABLE B-2
MONTHLY UNIMPAIRED RUNOFF
In Percent of Average

| MONTH | | KLAMATH RIVER, COPCO TO ORLEANS | SALMON RIVER AT SOMESBAR | TRINITY RIVER AT LEWISTON | EEL RIVER AT SCOTIA |
|-----------------------|---------|---------------------------------------|--------------------------------|---------------------------------|---------------------------|
| | Percent | | | | |
| October 1972 | Percent | 68 | 61 | 93 | 64 |
| | Average | 86 | 21 | 21 | 55 |
| November 1972 | Percent | 49 | 37 | 108 | 110 |
| | Average | 215 | 55 | 51 | 284 |
| December 1972 | Percent | 138 | 93 | 124 | 100 |
| | Average | 487 | 128 | 99 | 939 |
| January 1973 | Percent | 119 | 97 | 160 | 176 |
| | Average | 655 | 165 | 110 | 1225 |
| February 1973 | Percent | 64 | 64 | 111 | 96 |
| | Average | 607 | 158 | 149 | 1176 |
| March 1973 | Percent | 66 | 65 | 90 | 104 |
| | Average | 588 | 158 | 157 | 795 |
| April 1973 | Percent | 62 | 72 | 103 | 71 |
| | Average | 627 | 179 | 217 | 550 |
| May 1973 | Percent | 71 | 80 | 139 | 66 |
| | Average | 587 | 192 | 241 | 239 |
| June 1973 | Percent | 45 | 48 | 85 | 50 |
| | Average | 335 | 108 | 123 | 79 |
| July 1973 | Percent | 99 | 58 | 78 | 83 |
| | Average | 125 | 35 | 36 | 22 |
| August 1973 | Percent | 82 | 71 | 24 | 86 |
| | Average | 67 | 15 | 13 | 10 |
| September 1973 | Percent | 108 | 129 | 99 | 265 |
| | Average | 56 | 10 | 9 | 7 |
| 1972-73 Water Year | Percent | 81 | 73 | 113 | 112 |
| | Average | 4,434 | 1,225 | 1,227 | 5,379 |

Note: The percent values are preliminary data subject to revision. Average annual unimpaired runoff in thousands of acre-feet adjusted to the 50-year period October 1920 through September 1970.

TABLE B-3 DAILY MEAN DISCHARGE

A stream gaging station is named after the stream and the nearest post office. Each of the two gaging stations has been assigned an identification number, the letter and first digit of which denote the hydrographic unit; the remaining digits further identify the stations.

North Coastal Area

| | |
|------------------------------|--------------------|
| F0 - Smith River | F4 - Trinity River |
| F1 - Lost River-Butte Valley | F5 - Mad River |
| F2 - Shasta-Scott Valleys | F6 - Eel River |
| F3 - Klamath River | F7 - Mattole River |

The discharges estimated for periods of no record or invalid record are shown with the letter "E". Also qualified by the letter "E" are discharges obtained from extended ratings which exceed 140 percent of the highest measured flow-rate on which the rating curve was based.

The discharge figures in this table have been rounded off as follows:

1. Daily flows - cubic feet per second

| | | |
|---------|-----------|---------------|
| 0.0 | - 9.9 | nearest Tenth |
| 10 | - 999 | " Unit |
| 1,000 | - 9,999 | " Ten |
| 10,000 | - 99,999 | " Hundred |
| 100,000 | - 999,999 | " Thousand |

2. Monthly means - cubic feet per second

| | | |
|---------|-----------|---------------|
| 0.0 | - 99.9 | nearest Tenth |
| 100 | - 9,999 | " Unit |
| 10,000 | - 99,999 | " Ten |
| 100,000 | - 999,999 | " Hundred |

3. Yearly totals - acre-feet

| | | | |
|-----------|-------------|---------|----------|
| 0.0 | - 9,999 | nearest | Unit |
| 10,000 | - 99,999 | " | Ten |
| 100,000 | - 999,999 | " | Hundred |
| 1,000,000 | - 9,999,999 | " | Thousand |

TABLE B-3
DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

| DAY | WATER YEAR | | STATION NO. | STATION NAME | | | | | | | | | | |
|---------|------------|--------|-------------|-----------------------------------|-------|------|------|------|-----|-------|-------|-------|---------|----|
| | 1973 | F21300 | | LITTLE SHASTA RIVER NEAR MONTAGUE | | | | | | | | | | |
| 1 | 8.0 | 8.5 | 6.7 | 5.4 | 7.2 | 14 | 17 | 26 | 13 | 5.3 | 3.6 | 3.5 | 3.5 | 1 |
| 2 | 7.8 | 8.2 | 6.7 | 5.4 | 6.4 | 12 | 15 | 25 | 12 | 5.1 | 3.5 | 3.5 | 3.5 | 2 |
| 3 | 7.5 | 8.7 | 6.2 | 5.4 * | 6.6 | 12 | 16 | 25 | 11 | 5.0 | 3.5 | 3.5 | 3.5 | 3 |
| 4 | 7.3 | 11 | 6.5 | 5.4 | 6.9 | 11 | 19 | 26 | 11 | 5.0 | 3.6 | 3.4 | 3.4 | 4 |
| 5 | 7.2 | 9.2 | 6.7 | 5.4 | 10 | 9.7 | 24 | 25 | 10 | 4.9 | 3.5 | 3.4 | 3.4 | 5 |
| 6 | 7.1 | 7.7 | 6.7 | 5.4 | 11 | 11 | 27 | 24 | 9.7 | 4.9 | 3.4 | 3.4 | 3.4 | 6 |
| 7 | 7.1 | 8.4 | 7.0 | 5.4 | 12 | 9.7 | 26 | 23 | 9.3 | 4.8 | 3.5 | 3.5 | 3.5 | 7 |
| 8 | 7.2 | 8.5 | 7.0 | 5.4 | 12 | 9.5 | 25 | 22 | 9.0 | 4.7 | 3.4 | 3.5 | 3.5 | 8 |
| 9 | 8.4 | 7.9 | 7.0 | 6.0 | 12 | 10 | 27 | 22 | 8.8 | 4.6 | 3.5 | 3.5 | 3.5 | 9 |
| 10 | 8.0 | 7.6 | 7.2 | 6.2 | 12 | 17 | 28 | 21 | 8.6 | 4.5 * | 3.5 | 3.4 | 3.4 | 10 |
| 11 | 9.9 * | 8.1 | 7.5 | 7.2 | 11 | 16 | 30 | 20 | 8.3 | 4.5 | 3.5 | 3.4 | 3.4 | 11 |
| 12 | 8.8 | 7.7 | 7.8 | 11 | 9.6 | 13 | 31 | 20 | 8.2 | 4.7 | 3.5 | 3.4 | 3.4 | 12 |
| 13 | 8.3 | 7.5 | 7.8 | 27 | 8.5 | 12 | 32 | 20 | 8.2 | 4.3 | 3.5 | 3.4 | 3.4 | 13 |
| 14 | 8.6 | 7.5 | 7.8 | 20 | 8.5 | 11 | 26 | 21 | 8.1 | 4.2 | 3.4 * | 3.5 | 3.5 | 14 |
| 15 | 8.7 | 7.2 | 7.8 | 15 | 8.3 | 12 | 26 | 21 | 7.8 | 4.1 | 3.4 | 3.5 | 3.5 | 15 |
| 16 | 9.2 | 7.7 | 8.0 | 20 * | 8.4 | 13 | 27 | 20 | 7.7 | 4.9 | 3.3 | 3.5 | 3.5 | 16 |
| 17 | 8.8 | 6.9 * | 15 | 16 | 9.0 | 13 | 31 | 19 | 7.6 | 5.6 | 3.4 | 3.5 | 3.5 | 17 |
| 18 | 8.4 | 7.2 | 22 | 12 | 8.3 | 15 | 24 * | 18 * | 7.3 | 4.5 | 3.4 | 3.6 * | 3.6 * | 18 |
| 19 | 8.2 | 7.7 | 31 | 9.6 | 7.7 | 16 | 22 | 17 | 7.0 | 4.4 | 3.3 | 6.1 | 19 | |
| 20 | 8.0 | 7.5 | 21 | 9.2 | 8.2 | 14 | 20 | 16 | 6.6 | 4.4 | 3.3 | 5.6 | 20 | |
| 21 | 7.8 | 7.3 | 28 | 10 | 8.6 * | 14 | 21 | 16 | 6.3 | 4.3 | 3.3 | 4.3 | 21 | |
| 22 | 7.8 | 7.2 | 32 | 7.5 | 9.1 | 15 | 24 | 15 | 6.2 | 4.2 | 3.3 | 4.6 | 22 | |
| 23 | 7.8 | 6.7 | 16 | 12 | 9.4 | 15 | 26 | 15 | 6.3 | 4.0 | 3.3 | 5.5 | 23 | |
| 24 | 7.5 | 6.9 | 15 | 9.8 | 11 | 16 | 28 | 19 | 6.1 | 3.9 | 3.5 | 7.2 | 24 | |
| 25 | 7.5 | 6.9 | 9.1 | 8.0 | 12 | 18 | 30 | 18 | 5.9 | 3.8 | 3.7 | 5.6 | 25 | |
| 26 | 7.5 | 11 | 8.0 | 6.7 | 13 | 19 | 32 * | 15 | 5.7 | 3.7 | 3.5 | 3.9 | 26 | |
| 27 | 7.4 | 9.7 | 7.0 | 6.7 | 12 | 18 | 36 | 14 | 5.6 | 3.7 | 3.3 | 3.7 | 27 | |
| 28 | 7.7 | 8.2 | 6.2 | 6.7 | 14 | 15 | 31 | 13 | 5.6 | 3.8 | 3.2 | 3.5 | 28 | |
| 29 | 7.8 | 7.4 | 5.4 | 6.7 | | 14 | 29 | 12 | 5.5 | 3.7 | 3.2 | 3.4 | 29 | |
| 30 | 7.1 | 6.7 | 5.4 | 7.0 | | 15 * | 27 | 13 | 5.4 | 3.7 | 3.2 | 3.4 | 30 | |
| 31 | 7.4 | | 5.4 | 6.7 | | 17 | | 15 | | 3.6 | 3.3 | | 31 | |
| MEAN | 7.9 | 8.0 | 11.0 | 10.8 | 9.7 | 13.8 | 25.9 | 19.2 | 7.9 | 4.4 | 3.4 | 4.0 | MEAN | |
| MAX. | 9.9 | 11 | 32 | 27 | 14 | 19 | 36 | 26 | 13 | 5.6 | 3.7 | 7.2 | MAX. | |
| MIN. | 7.1 | 6.7 | 5.4 | 5.4 | 6.4 | 9.5 | 15 | 12 | 5.4 | 3.6 | 3.2 | 3.4 | MIN. | |
| AC. FT. | 488 | 473 | 676 | 575 | 541 | 847 | 1541 | 1182 | 472 | 271 | 210 | 236 | AC. FT. | |

WATER YEAR SUMMARY

| MEAN DISCHARGE 10.4 | MAXIMUM DISCHARGE 53 | MINIMUM DISCHARGE 2.7 | TOTAL ACRE FEET 7512 |
|---------------------------|----------------------------|-----------------------------|----------------------------|
| GAGE HT. 1.78 | MO. DAY TIME 12 18 2015 | GAGE HT. 0.62 | ACRE FEET 7512 |
| DISCHARGE 10.4 | DISCHARGE 53 | DISCHARGE 2.7 | DISCHARGE 10.4 |

| LOCATION | | | MAXIMUM DISCHARGE | | | PERIOD OF RECORD | | | | DATUM OF GAGE | | | |
|----------|-----------|-------------------------------|-------------------|----------|----------|---|---------------------|---|------|--------------------|---------------|-------|--|
| LATITUDE | LONGITUDE | 1/4 SEC. T. & R. M.D.B.&M. | OF RECORD | | | DISCHARGE | GAGE HEIGHT ONLY | PERIOD | | ZERO ON GAGE | REF. DATUM | | |
| | | | CFS | GAGE HT. | DATE | | | FROM | TO | | | | |
| 41 45 11 | 122 17 58 | NW15 45N 4W | 5910 E | 10.66 | 12/22/64 | 28-NOV 51 8 APR 52-APR 55 SEP 56-DATE | 0.62 | 28-NOV 51 8 APR 52-APR 55 SEP 56-DATE | 1956 | 1964 | 0.00 | LOCAL | |

Station located S of Bell Mountain Road, 12 mi. NE of Montague, 16 mi. SW of Macdoel. Stage-discharge relationship affected by ice at times. Drainage area is 48.2 sq. mi.

8 - Irrigation season only.

ABLE B-3 (CONT.)
DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

| WATER YEAR | | STATION NO. | STATION NAME |
|------------|--------|--------------------------------------|--------------|
| 1973 | F42100 | NORTH FORK TRINITY RIVER NEAR HELENA | |

| DAY | OCT. | NOV. | DEC. | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEPT. | DAY |
|--------|------|-------|-------|--------|-------|-------|-------|-------|-------|------|------|-------|--------|
| 1 | 39 | 45 * | 165 | 353 | 377 | 891 | 458 | 601 | 415 | 113 | 31 | 23 | 1 |
| 2 | 36 | 59 | 156 | 326 | 364 | 786 | 445 | 616 | 332 | 101 | 30 | 23 | 2 |
| 3 | 33 | 126 | 177 | 293 | 358 | 712 | 439 | 617 | 310 | 98 | 29 | 23 | 3 |
| 4 | 31 | 389 | 165 | 263 * | 418 | 627 | 450 | 584 | 270 * | 99 | 27 | 23 * | 4 |
| 5 | 30 | 235 | 142 * | 244 | 726 | 569 * | 522 | 510 | 280 | 103 | 26 | 22 | 5 |
| 6 | 29 | 150 | 146 | 230 | 717 | 595 | 650 | 511 | 308 | 97 | 25 | 22 | 6 |
| 7 | 29 | 205 | 137 | 214 | 648 | 590 | 721 | 523 | 316 | 90 | 24 | 22 | 7 |
| 8 | 28 | 168 | 87 | 209 | 594 | 573 | 713 | 505 | 320 | 85 | 24 | 22 | 8 |
| 9 | 38 | 178 | 120 | 220 | 580 | 550 | 766 * | 513 | 304 | 81 | 24 | 22 | 9 |
| 10 | 61 * | 199 | 116 | 224 | 690 | 604 | 802 | 506 | 261 | 78 * | 24 | 22 | 10 |
| 11 | 154 | 231 | 115 | 508 | 684 | 645 | 861 | 529 | 250 | 80 | 26 | 22 | 11 |
| 12 | 104 | 194 | 162 | 1360 | 620 | 585 | 851 | 608 | 244 | 94 | 29 | 22 | 12 |
| 13 | 90 | 200 | 144 | 2470 | 548 | 534 | 799 | 730 | 221 | 86 | 28 | 22 | 13 |
| 14 | 90 | 242 | 116 | 1630 | 527 | 485 | 688 | 868 | 187 | 77 | 27 | 21 | 14 |
| 15 | 105 | 215 | 115 | 1380 * | 500 | 457 | 632 | 874 | 160 | 70 | 26 | 21 | 15 |
| 16 | 147 | 280 | 178 | 2900 | 474 | 455 | 610 | 857 | 152 | 66 | 26 | 21 | 16 |
| 17 | 122 | 249 | 1240 | 1950 | 462 | 442 | 623 | 862 * | 144 | 67 | 26 | 21 | 17 |
| 18 | 103 | 217 | 1620 | 1610 | 445 | 421 | 547 * | 822 | 134 | 72 | 25 | 21 | 18 |
| 19 | 88 | 238 | 2090 | 1290 | 431 | 434 | 485 | 701 | 141 | 69 | 25 | 35 | 19 |
| 20 | 76 | 242 | 1570 | 1000 | 416 | 443 | 447 | 576 | 160 | 81 | 24 | 76 | 20 |
| 21 | 66 | 216 | 1690 | 831 | 408 | 450 | 430 | 514 | 183 | 65 | 23 | 43 | 21 |
| 22 | 64 | 209 | 2500 | 703 | 404 | 437 | 459 | 500 | 185 | 57 | 23 | 46 | 22 |
| 23 | 60 | 196 | 1580 | 626 * | 394 | 444 | 545 | 483 | 163 | 52 | 23 | 195 | 23 |
| 24 | 57 | 182 | 1250 | 581 | 557 | 457 | 589 | 593 | 139 | 46 | 24 | 198 | 24 |
| 25 | 52 | 165 | 945 | 531 | 838 | 476 | 666 | 503 | 146 | 41 | 26 | 138 | 25 |
| 26 | 48 | 198 | 733 | 482 | 1030 | 505 | 855 | 381 | 174 | 38 | 25 | 79 | 26 |
| 27 | 46 | 270 | 650 | 451 | 1160 | 521 | 934 | 345 | 166 | 38 | 23 | 57 | 27 |
| 28 | 44 | 211 | 571 | 425 | 955 | 494 | 874 | 381 | 156 | 37 | 23 | 46 | 28 |
| 29 | 43 | 194 | 499 | 415 | | 466 | 771 | 403 | 151 | 36 | 23 | 40 | 29 |
| 30 | 40 | 176 | 444 | 403 | | 490 | 650 | 455 | 135 | 35 | 23 | 36 | 30 |
| 31 | 39 | | 395 | 397 | | 477 | | 465 | | 32 | 23 | | 31 |
| MEAN | 64.3 | 203 | 646 | 791 | 583 | 536 | 643 | 579 | 217 | 70.5 | 25.3 | 46.1 | MEAN |
| MAX. | 154 | 389 | 2500 | 2900 | 1160 | 891 | 934 | 874 | 415 | 113 | 31 | 198 | MAX. |
| MIN. | 28 | 45 | 87 | 209 | 358 | 421 | 430 | 345 | 134 | 32 | 23 | 21 | MIN. |
| C. FT. | 3951 | 12060 | 39710 | 48630 | 32380 | 32960 | 38250 | 35580 | 12910 | 4332 | 1557 | 2745 | AC.FT. |

WATER YEAR SUMMARY

| MEAN DISCHARGE | MAXIMUM DISCHARGE | MINIMUM DISCHARGE | TOTAL ACRE FEET |
|-------------------|----------------------|----------------------|--------------------|
| 366 | 3590 | 21 | 265,065 |

| LOCATION | | | MAXIMUM DISCHARGE | | | PERIOD OF RECORD | | | DATUM OF GAGE | | |
|----------|-----------|-------------------------------|-------------------|----------|----------|------------------|---------------------|--------|---------------|--------------------|---------------|
| LATITUDE | LONGITUDE | 1/4 SEC. T. & R. M.D.B.&M. | OF RECORD | | | DISCHARGE | GAGE HEIGHT ONLY | PERIOD | | ZERO ON GAGE | REF. DATUM |
| | | | CFS | GAGE HT. | DATE | | | FROM | TO | | |
| 40 46 55 | 123 07 40 | SW21 34N 11W | 35800 | 27.93 | 12/22/64 | JAN 57-DATE | JAN 57-DATE | 1957 | | 0.00 | LOCAL |

Station located 1.0 mi. above mouth, 0.6 mi. N of Helena. Stage-discharge relationship affected by ice at times. Drainage area is 151 sq. mi.



GROUND WATER BASINS, WATER LEVEL MEASUREMENTS

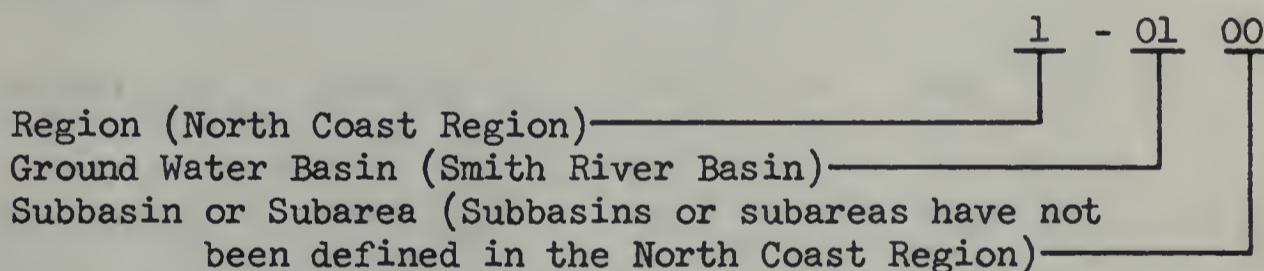
APPENDIX C
GROUND WATER MEASUREMENTS

This appendix contains ground water level measurements from 53 wells for the period October 1, 1972 through September 30, 1973. It also contains a table which summarizes the measurements. Wells in the network are continuously reviewed and, when conditions dictate, replacement wells are located and measured.

There are nine ground water basins in the North Coastal Region for which data are reported.

Two numbering systems are used by the Department to facilitate the processing of water level measurement data. The two systems are the Region and Basin Designation and the State Well Numbering System as described below.

The regions are those of the California Regional Water Quality Control Boards whose geographic areas are defined in Section 13200 of the Water Code. That portion of Northern California covered by this report is included in the North Coast Region. A decimal system of the form 0-00.00 has been selected according to geographic regions, ground water basins, and subbasins or subareas as follows:



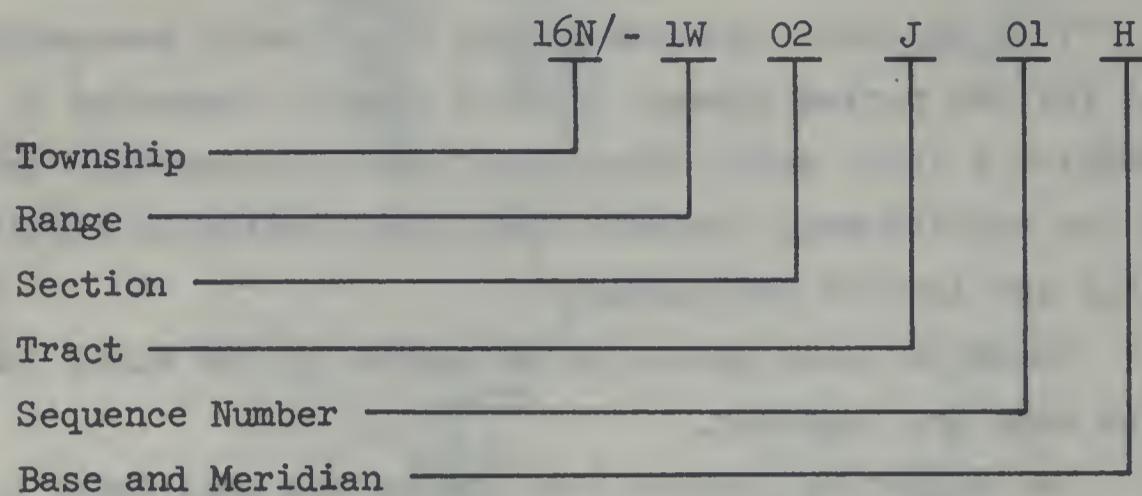
The State Well Numbering System is based on township, range, and section subdivisions of the Public Land Survey.

A section is divided into 40-acre tracts as follows:

| | | | |
|---|---|---|---|
| D | C | B | A |
| E | F | G | H |
| M | L | K | J |
| N | P | Q | R |

Sequence numbers in a tract are generally assigned in chronological order.

The number of a well, assigned in accordance with this system, is referred to as the State Well Number, as illustrated below:



This number identifies and locates the well. In the example, the well is in Township 16 North, Range 1 West, Tract J of Section 2, located in the Humboldt Base and Meridian.

TABLE C-1
AVERAGE CHANGE OF GROUND WATER LEVELS
AND SUMMARY OF WELL MEASUREMENTS REPORTED
NORTH COASTAL AREA

| <u>Ground Water Basin</u> | <u>Name</u> | <u>Number</u> | <u>Average Change</u> | <u>Spring 1972 to</u> | <u>Measuring Agency</u> | <u>Number of Wells Reported</u> | <u>Fall 1972</u> | <u>Spring 1973</u> |
|---------------------------|-------------|---------------|-----------------------|-----------------------|-------------------------|---------------------------------|------------------|--------------------|
| | | | | | | | | |

NORTH COASTAL REGION

| | | | | | |
|--------------------|---------|------|-----|----|----|
| Smith River Plain | 1-01.00 | -1.7 | DWR | 5 | 5 |
| Butte Valley | 1-03.00 | -1.5 | DWR | 15 | 15 |
| Shasta Valley | 1-04.00 | +3.5 | DWR | 7 | 7 |
| Scott River Valley | 1-05.00 | -1.6 | DWR | 5 | 5 |
| Mad River Valley | 1-08.00 | -0.7 | DWR | 2 | 2 |
| Eel River Valley | 1-10.00 | -0.5 | DWR | 4 | 4 |
| Round Valley | 1-11.00 | +0.5 | DWR | 5 | 5 |
| Laytonville Valley | 1-12.00 | +0.9 | DWR | 4 | 4 |
| Little Lake Valley | 1-13.00 | 0.0 | DWR | 5 | 5 |

DWR - Department of Water Resources

TABLE C-2 GROUND WATER LEVELS AT WELLS

An explanation of the column headings and the code symbols follows:

State Well Number - Refer to the explanation presented on page 17.

Ground Surface Elevation - The numbers in this column are the elevation in feet above mean sea level (USGS datum) of the ground surface at the well. Elevations are usually taken from topographic maps and the accuracy is controlled by topographic standards.

Date - The date shown in the column is the date when the depth measurement given in the next column was made.

Ground Surface to Water Surface - This is the measured depth in feet from the ground surface to the water surface in the well; some of the depth measurements in the column may be preceded by a number in parentheses to indicate a questionable measurement. The code applicable to these "questionable measurements" is as follows:

- | | |
|--------------------------------------|--|
| (1) Pumping | (6) Other |
| (2) Nearby pump operating | (7) Recharge operation at or near well |
| (3) Casing leaking or wet | (8) Oil in casing |
| (4) Pumped recently | (9) Caved or deepened |
| (5) Air or pressure gage measurement | |

When a measurement was attempted, but could not be obtained, then only a number in parentheses is shown in the column. The code applicable to these "no measurements" is as follows:

- | | |
|-------------------------------|-------------------------------|
| (1) Pumping | (6) Well has been destroyed |
| (2) Pump house locked | (7) Special |
| (3) Tape hung up | (8) Casing leaking or wet |
| (4) Cannot get tape in casing | (9) Temporarily inaccessible |
| (5) Unable to locate well | (0) Measurements discontinued |

The words FLOW and DRY are shown in this column to indicate a flowing or dry well, respectively. A minus sign preceding the number in this column indicates that the static water level in the well is this distance in feet above the ground surface.

Water Surface Elevation - This is the elevation in feet above mean sea level (USGS datum) of the water surface in the well. It was derived by subtraction of the depth measurement from the ground surface elevation.

Agency Supplying Data - Each of these numbers is the code number for the agency supplying data for that measurement. The Department of Water Resources is the sole agency supplying ground water level measurement data for this report. It has been assigned an agency code number of 5050.

TABLE C-2
GROUND WATER LEVELS AT WELLS
NORTH COASTAL AREA

| STATE WELL NUMBER | GROUND SURFACE ELEVATION IN FEET | DATE | GROUND SURFACE TO WATER SURFACE IN FEET | WATER SURFACE ELEVATION IN FEET | AGENCY SUPPLYING DATA | STATE WELL NUMBER | GROUND SURFACE ELEVATION IN FEET | DATE | GROUND SURFACE TO WATER SURFACE IN FEET | WATER SURFACE ELEVATION IN FEET | AGENCY SUPPLYING DATA |
|----------------------------------|----------------------------------|---------------------|---|---------------------------------|-----------------------|-----------------------------------|----------------------------------|---------------------|---|---------------------------------|-----------------------|
| SMITH RIVER PLAIN 1-01.00 | | | | | | | | | | | |
| 16N/01W-02J01 H | 127.0 | 10-11-72 4-10-73 | 22.2 16.9 | 104.8 110.1 | 5050 5050 | 42N/09W-02A02 M | 2746.0 | 10-03-72 4-20-73 | 12.5 6.0 | 2733.5 2740.0 | 5050 5050 |
| 16N/01W-17K01 H | 48.0 | 10-11-72 4-10-73 | 21.3 14.2 | 26.7 33.8 | 5050 5050 | 42N/09W-27N01 M | 2930.0 | 10-03-72 4-20-73 | 6.9 2.2 | 2923.1 2927.8 | 5050 5050 |
| 17N/01W-02P01 H | 31.0 | 10-11-72 4-10-73 | 20.7 16.5 | 10.3 14.5 | 5050 5050 | 43N/09W-23F01 M | 2728.0 | 10-03-72 4-20-73 | 6.0 4.2 | 2722.0 2723.8 | 5050 5050 |
| 17N/01W-03E01 H | 14.0 | 10-11-72 4-10-73 | 13.0 9.9 | 1.0 4.1 | 5050 5050 | 43N/09W-24F01 M | 2735.0 | 10-03-72 4-20-73 | 9.2 5.7 | 2725.8 2729.3 | 5050 5050 |
| 17N/01W-15M02 H | 21.0 | 10-11-72 4-10-73 | 16.4 8.2 | 4.6 12.8 | 5050 5050 | 44N/09W-28P01 M | 2711.0 | 10-03-72 4-20-73 | 21.7 13.7 | 2689.3 2697.3 | 5050 5050 |
| BUTTE VALLEY 1-03.00 | | | | | | | | | | | |
| 45N/01W-06A01 M | 4258.0 | 10-04-72 4-19-73 | 33.8 29.6 | 4224.2 4228.4 | 5050 5050 | 06N/01E-06H01 H | 151.0 | 10-11-72 4-11-73 | 11.8 (0) | 139.2 | 5050 5050 |
| 45N/02W-11P01 M | 4275.0 | 10-03-72 4-19-73 | 46.1 53.7 | 4228.9 4221.3 | 5050 5050 | 06N/01E-29P01 H | 25.0 | 10-11-72 4-11-73 | (9) 9.6 | 15.4 | 5050 5050 |
| 46N/01E-06N01 M | 4242.0 | 10-04-72 4-19-73 | 26.3 20.5 | 4215.7 4221.5 | 5050 5050 | EEL RIVER VALLEY 1-10.00 | | | | | |
| 46N/01W-17B01 M | 4246.0 | 10-04-72 4-19-73 | 43.1 31.0 | 4202.9 4215.0 | 5050 5050 | 02N/01W-08B01 H | 34.0 | 10-10-72 4-11-73 | 22.3 14.8 | 11.7 19.2 | 5050 5050 |
| 46N/01W-18Q01 M | 4247.0 | 10-04-72 4-19-73 | 23.0 18.6 | 4224.0 4228.4 | 5050 5050 | 03N/01W-18D01 H | 15.0 | 10-10-72 4-11-73 | 5.0 3.0 | 10.0 12.0 | 5050 5050 |
| 46N/02W-25R02 M | 4256.0 | 10-03-72 4-19-73 | 32.1 27.8 | 4223.9 4228.2 | 5050 5050 | 03N/01W-34J01 H | 53.0 | 10-10-72 4-11-73 | 35.1 31.8 | 17.9 21.2 | 5050 5050 |
| 46N/02W-26Q01 M | 4254.0 | 10-04-72 4-19-73 | 15.4 13.7 | 4238.6 4240.3 | 5050 5050 | 03N/02W-26R01 H | 12.0 | 10-10-72 4-11-73 | 10.3 5.7 | 1.7 6.3 | 5050 5050 |
| 47N/01E-06A02 M | 4244.5 | 10-04-72 4-19-73 | 32.5 NM (1) | 4212.0 | 5050 | ROUND VALLEY 1-11.00 | | | | | |
| 47N/01E-20D01 M | 4240.0 | 10-04-72 4-19-73 | 26.2 22.2 | 4213.8 4217.8 | 5050 5050 | 22N/12W-04B01 M | 1351.0 | 10-12-72 4-12-73 | 15.4 6.2 | 1335.6 1344.8 | 5050 5050 |
| 47N/01W-04D01 M | 4241.5 | 10-04-72 4-19-73 | 6.3 6.2 | 4235.2 4235.3 | 5050 5050 | 22N/12W-06L03 M | 1370.0 | 10-12-72 4-12-73 | 1.6 -11.2 | 1368.4 1381.2 | 5050 5050 |
| 47N/01W-04D02 M | 4241.5 | 10-04-72 4-19-73 | 6.5 6.4 | 4235.0 4235.1 | 5050 5050 | 22N/13W-12R01 M | 1400.0 | 10-12-72 4-12-73 | 28.1 6.2 | 1371.9 1393.8 | 5050 5050 |
| 47N/01W-19L01 M | 4238.0 | 10-04-72 4-19-73 | 4.5 5.3 | 4233.5 4232.7 | 5050 5050 | 23N/13W-36C03 M | 1410.0 | 10-12-72 4-12-73 | 29.6 8.7 | 1380.4 1401.3 | 5050 5050 |
| 47N/01W-27B01 M | 4233.0 | 10-04-72 4-19-73 | 8.0 8.2 | 4225.0 4224.8 | 5050 5050 | 23N/13W-36Q01 M | 1403.0 | 10-12-72 4-12-73 | 20.7 1.1 | 1382.3 1401.9 | 5050 5050 |
| 47N/01W-34Q01 M | 4237.0 | 10-04-72 4-19-73 | 19.3 16.3 | 4217.7 4220.7 | 5050 | LAYTONVILLE VALLEY 1-12.00 | | | | | |
| 48N/01W-26N01 M | 4244.0 | 10-06-72 4-19-73 | 20.3 24.8 | 4223.7 4219.2 | 5001 5050 | 21N/14W-30M01 M | 1688.0 | 10-11-72 4-12-73 | 16.4 4.3 | 1671.6 1683.7 | 5050 5050 |
| SHASTA VALLEY 1-04.00 | | | | | | | | | | | |
| 42N/05W-20J01 M | 2882.0 | 10-03-72 4-20-73 | 2.0 5.7 | 2880.0 2876.3 | 5050 5050 | 21N/15W-01L02 M | 1682.0 | 10-11-72 4-12-73 | 23.7 7.2 | 1658.3 1674.8 | 5050 5050 |
| 42N/06W-10J01 M | 2835.0 | 10-03-72 4-20-73 | 12.3 2.3 | 2822.7 2832.7 | 5050 5050 | 21N/15W-12M02 M | 1630.0 | 10-11-72 4-12-73 | 17.3 4.7 | 1612.7 1625.3 | 5050 5050 |
| 43N/05W-11A01 M | 2740.0 | 10-03-72 4-19-73 | 126.9 126.8 | 2613.1 2613.2 | 5050 5050 | 21N/15W-24A01 M | 1653.0 | 10-11-72 4-12-73 | 12.3 2.5 | 1640.7 1650.5 | 5050 5050 |
| 43N/06W-15F03 M | 2663.0 | 10-03-72 4-20-73 | 9.4 8.4 | 2653.6 2654.6 | 5050 5050 | LITTLE LAKE VALLEY 1-13.00 | | | | | |
| 43N/06W-22A01 M | 2665.0 | 10-03-72 4-20-73 | 13.6 (2)15.5 | 2651.4 2649.5 | 5050 5050 | 18N/13W-08L01 M | 1340.0 | 10-12-72 4-13-73 | 8.6 1.8 | 1331.4 1338.2 | 5050 5050 |
| 44N/05W-34H01 M | 2637.0 | 10-03-72 4-19-73 | 26.0 29.0 | 2611.0 2608.0 | 5050 5050 | 18N/13W-17J01 M | 1370.0 | 10-12-72 4-13-73 | 22.9 19.4 | 1347.1 1350.6 | 5050 5050 |
| 44N/06W-10F01 M | 2537.0 | 10-03-72 4-20-73 | 16.5 27.0 | 2520.5 2510.0 | 5050 5050 | 18N/13W-18E01 M | 1365.0 | 10-12-72 4-13-73 | 25.9 18.4 | 1339.1 1346.6 | 5050 5050 |
| 45N/06W-19E01 M | 2538.0 | 10-03-72 4-20-73 | 25.5 19.2 | 2512.5 2518.8 | 5050 5050 | 19N/13W-32F01 M | 1347.0 | 10-12-72 4-13-73 | 14.2 4.8 | 1332.8 1342.2 | 5050 5050 |
| | | | | | | 19N/13W-32L02 M | 1350.0 | 10-12-72 4-13-73 | 12.5 6.7 | 1337.5 1343.3 | 5050 5050 |



SURFACE WATER SAMPLING STATIONS

APPENDIX D
SURFACE WATER QUALITY

This appendix presents surface water quality data collected during the period from October 1, 1972, through September 30, 1973. The data were collected from 26 stream stations in the North Coastal area.

At the time of field sampling, dissolved oxygen, pH, and temperature measurements are made and gage height and time are noted. Comments on local conditions are noted in field books which are available in the files of the Department of Water Resources. The mineral constituents were determined in accordance with methods described in "Standard Methods for the Examination of Water and Waste Water", prepared and published jointly by the American Public Health Association, American Water Works Association, and Water Pollution Control Federation, 13th Edition, 1971.

Each station in this appendix has been assigned a station number. The numbering system is described in Appendix B, "Surface Water Measurements". For reference purposes, the original station number is given in parentheses following each station name.

TABLE D-1
SAMPLING STATION DATA AND INDEX
North Coastal Area

| Station | Station Number | Location* | Beginning of Record | Frequency of Sampling | Analyses on Page |
|--|----------------|--------------|---------------------|-----------------------|--------------------|
| BEAR RIVER AT CAPETOWN | F75100.00 | 01N/03W-13 H | MAY 1964 | Semiannually | 36 |
| BLACK BUTTE RIVER NEAR COVELO | F63200.00 | 23N/11W-28 M | NOV. 1964 | Monthly | 34, 35 |
| EEL RIVER ABOVE OUTLET CREEK | F61329.50 | 21N/13W-32 M | APR. 1958 | Monthly | 32, 33, 45 |
| EEL RIVER AT SCOTIA | F61100.00 | 01N/01E-05 H | APR. 1951 | Monthly | 31, 32, 37, 39, 43 |
| EEL RIVER AT SOUTH FORK | F61154.50 | 01S/02E-26 H | APR. 1951 | Monthly | 32 |
| EEL RIVER, MIDDLE FORK, AT DOS RIOS | F63009.01 | 21N/13W-06 M | APR. 1958 | Monthly | 33, 34, 45 |
| EEL RIVER, SOUTH FORK, NEAR MIRANDA | F64100.00 | 03S/04E-30 H | APR. 1951 | Monthly | 35 |
| KLAMATH RIVER ABOVE HAMBURG RESERVOIR SITE | F31470.00 | 46N/10W-14 M | DEC. 1958 | Bimonthly | 29, 37, 41, 43 |
| KLAMATH RIVER AT ORLEANS | F31220.01 | 11N/06E-31 H | JAN. 1964 | Monthly | 28 |
| KLAMATH RIVER BELOW IRON GATE DAM | F31599.01 | 47N/05W-20 M | DEC. 1961 | Monthly | 29, 30, 37, 41, 43 |
| KLAMATH RIVER NEAR KLAMATH | F31100.00 | 13N/02E-19 H | APR. 1951 | Monthly | 28, 37, 39, 43 |
| KLAMATH RIVER NEAR SEIAD VALLEY | F31430.00 | 46N/12W-03 M | DEC. 1958 | Monthly | 28, 29, 37, 41, 43 |
| MAD RIVER NEAR ARCATA | F51100.00 | 06N/01E-15 H | NOV. 1958 | Bimonthly | 31 |
| MATTOLE RIVER NEAR PETROLIA | F71100.00 | 02S/02W-11 H | JAN. 1959 | Semiannually | 35 |
| MILL CREEK NEAR COVELO | F63050.00 | 22N/12W-22 M | FEB. 1965 | Monthly | 34, 45 |
| OUTLET CREEK NEAR LONGVALE | F61350.00 | 20N/14W-01 M | MAY 1958 | Monthly | 33 |
| REDWOOD CREEK AT ORICK | F55100.00 | 10N/01E-04 H | NOV. 1958 | Monthly | 31 |
| SALMON RIVER AT SOMESBAR | F34100.00 | 11N/06E-03 H | NOV. 1958 | Semiannually | 30 |
| SCOTT RIVER NEAR FORT JONES | F25250.00 | 44N/10W-28 M | DEC. 1958 | Bimonthly | 27, 37, 41, 43 |
| SHASTA RIVER NEAR YREKA | F21050.00 | 46N/07W-24 M | DEC. 1958 | Bimonthly | 27, 37, 41, 43 |
| SMITH RIVER NEAR CRESCENT CITY | F01300.00 | 16N/01E-10 H | APR. 1951 | Monthly | 27 |
| TRINITY RIVER AT HOOPA | F41080.00 | 08N/04E-25 H | APR. 1951 | Monthly | 30, 43 |
| TRINITY RIVER AT LEWISTON | F41640.00 | 33N/08W-17 M | APR. 1951 | Bimonthly | 30, 31, 37, 43 |
| TRINITY RIVER NEAR BURNT RANCH | F41376.00 | 05N/07E-19 H | APR. 1958 | Bimonthly | 30, 43 |
| VAN DUZEN RIVER NEAR BRIDGEVILLE | F65279.00 | 01N/02E-12 H | APR. 1958 | Monthly | 35 |

* N = Humboldt Base and Meridian
M = Modoc Diablo Base and Meridian

TABLE D-2 MINERAL ANALYSES OF SURFACE WATER

Lab and Sampler Agency Codes

5000 - U. S. Geological Survey

5050 - Department of Water Resources

Abbreviations

| | |
|--------------------------|---|
| <u>TIME</u> | - Pacific Standard Time on a 24-hour clock. |
| <u>G.H.</u> | - Instantaneous gage height in feet above an established datum. |
| <u>Q</u> | - Instantaneous discharge measured in cubic feet per second (cfs). "E" indicates the value has been estimated. |
| <u>DEPTH</u> | - Depth at which sample was collected. |
| <u>DO</u> | - Dissolved oxygen content in milligrams per liter. |
| <u>SAT</u> | - Percent of normal dissolved oxygen saturation. |
| <u>TEMP</u> | - Water temperature in degrees Fahrenheit (F) and Celsius (C). |
| <u>PH</u> | - Measure of acidity or alkalinity of water. |
| <u>EC</u> | - Electrical conductance in micromhos at 25° C. |
| <u>TDS</u> | - Gravimetric determination of total dissolved solids at 180° C. |
| <u>SUM</u> | - Total dissolved solids by summation of analyzed constituents. |
| <u>TH</u> | - Total hardness. |
| <u>NCH</u> | - Noncarbonate hardness - any excess of total hardness over total alkalinity. |
| <u>TURB</u> | - Jackson Turbidity Units measured with a Hellege Turbidimeter (E) or a Hach Nephelometer (A). Field determination (F). |
| <u>SAR</u> | - Sodium adsorption ratio. |
| <u>PERCENT REACTANCE</u> | |
| <u>VALUE</u> | - Determined by dividing the sum of the cations or anions in milliequivalents per liter into each constituent in milliequivalents per liter arriving at a percentage. For a partial analysis, an approximate value is determined by multiplying the electrical conductance by 0.01 and using that as the cation or anion sum. |

Mineral Constituents

| | | | |
|------------------|---------------|------------------|-------------|
| B | - Boron | K | - Potassium |
| CA | - Calcium | MG | - Magnesium |
| CL | - Chloride | NA | - Sodium |
| CO ₃ | - Carbonate | NO ₃ | - Nitrate |
| F | - Fluoride | SiO ₂ | - Silica |
| HCO ₃ | - Bicarbonate | SO ₄ | - Sulfate |

TABLE D-2
MINERAL ANALYSES OF SURFACE WATER

| DATE TIME | SAMPLER LAB | G.H. O DEPTH | DO SAT | TEMP PH | FIELD LABORATORY EC | MINERAL CONSTITUENTS IN CA MG NA K CO ₃ HC ₀₃ SO ₄ CL NO ₃ | MILLIGRAMS PER LITER | | | MILLIEQUIVALENTS PER LITER | | | PERCENT REFRACTANCE VALUE | | | MILLIGRAMS PER LITER | | |
|--|----------------|--------------------|-------------|----------------|---------------------------|---|-----------------------|-----------------|------------------|----------------------------|-----------------|-------------|---------------------------|-----------------|-----------|-----------------------|-----------------|------------------|
| | | | | | | | 8 SiO ₂ | F TOS SUM | TH NCH | 8 SiO ₂ | F TOS SUM | TH NCH | 8 SiO ₂ | F TOS SUM | TH NCH | 8 SiO ₂ | F TOS SUM | TH NCH |
| FO 1300.00 SMITH RIVER NEAR CRESCENT CITY | | | | | | | | | | | | | | | | | | |
| 10/03/72 0715 | 5050 5050 | 7.97 228 | 9.0 89 | 59.0F 15.0C | 7.5 7.8 | 164 163 | -- | -- | 3.0 .13 8 | -- | 0 .00 | .89 1.46 | -- | 4.8 .14 | -- | .00 -- | -- | 78 0A 0.1 |
| 11/14/72 0845 | 5050 5050 | 9.53 1100 | 11.5 99 | 48.2F 9.0C | 7.5 | 117 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF |
| 12/05/72 0815 | 5050 5050 | 10.61 1970 | 12.9 101 | 41.0F 5.0C | 8.0 | 106 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF |
| 01/17/73 0815 | 5050 5050 | 18.43 17300 | 12.4 103 | 45.5F 7.5C | 7.3 | 78 | -- | -- | 1.8 .08 9 | -- | 0 .00 | .43 .70 | -- | 4.6 .13 | -- | .00 -- | -- | 39 75A 0.1 |
| 02/05/73 1600 | 5050 5050 | 14.06 7010 | 12.1 103 | 47.3F 8.5C | 7.3 | 84 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 17AF |
| 03/06/73 0750 | 5050 5050 | 12.77 4320 | 11.5 95 | 44.6F 7.0C | 7.6 | 87 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 5AF |
| 04/02/73 1535 | 5050 5050 | 12.45 4540 | 11.7 100 | 47.3F 8.5C | 7.4 | 89 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2AF |
| 05/23/73 0605 | 5050 5050 | 8.76 880 | 10.0 97 | 57.2F 14.0C | 7.4 | 113 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2AF |
| 06/20/73 0715 | 5050 5050 | 8.29 574 | 9.9 100 | 60.8F 16.0C | 7.8 | 125 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0AF |
| 07/10/73 0700 | 5050 5050 | 7.95 360E | 9.5 100 | 64.4F 18.0C | 7.9 | 143 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0AF |
| 08/07/73 0625 | 5050 5050 | 7.61 269 | 8.9 96 | 66.2F 19.0C | 7.7 | 154 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0AF |
| 09/12/73 0710 | 5050 5050 | 7.45 220 | 10.2 103 | 60.8F 16.0C | 7.7 | 156 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0AF |
| F2 1050.00 SHASTA RIVER NEAR YREKA | | | | | | | | | | | | | | | | | | |
| 11/03/72 0900 | 5050 5050 | 3.40 175 | 10.8 100 | 48.2F 9.0C | 8.1 | 483 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2AF |
| 01/24/73 0910 | 5050 5050 | 3.54 235 | 11.7 95 | 39.2F 4.0C | 8.0 | 500 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 8AF |
| 03/13/73 1405 | 5050 5050 | 3.48 205 | 8.8 79 | 46.4F 8.0C | 8.2 | 460 | -- | -- | 33 1.44 30 | -- | 0 .00 | 257 4.21 | -- | 19 .54 | -- | .40 -- | -- | 168 1A 1.1 |
| 05/16/73 0810 | 5050 5050 | 3.08 88 | 8.5 96 | 64.4F 18.0C | 8.1 | 584 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2AF |
| 07/02/73 1225 | 5050 5050 | 2.63 18 | 9.5 118 | 73.4F 23.0C | 8.4 | 719 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2AF |
| 09/07/73 0745 | 5050 5050 | 2.63 23 | 10.2 109 | 59.9F 15.5C | 8.2 | 710 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF |
| 09/07/73 1115 | 5050 5050 | 2.66 121 | 10.8 121 | 64.4F 18.0C | 8.3 | 675 | 42 | 44 | 50 2.18 26 | 3.6 2.09 27 | 24 1.80 1 | 374 6.13 | 9.9 .21 | 37 1.04 | .60 -- | 389 395 | 287 0 | 1A 1.3 |
| F2 5250.00 SCOTT RIVER NEAR FORT JONES | | | | | | | | | | | | | | | | | | |
| 11/03/72 1215 | 5050 5050 | 5.02 100E | 10.6 100 | 48.2F 9.0C | 7.6 | 282 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2AF |
| 01/24/73 1220 | 5050 5050 | 6.87 752 | 11.4 91 | 36.5F 2.5C | 7.2 | 206 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 12AF |
| 03/13/73 1645 | 5050 5050 | 6.25 438 | 10.5 94 | 44.6F 7.0C | 7.5 | 187 | -- | -- | 3.4 .15 7 | -- | 0 .00 | 110 1.80 | -- | 1.6 .05 | -- | .00 -- | -- | 93 0A 0.2 |
| 05/16/73 1130 | 5050 5050 | 6.78 1630 | 9.8 100 | 54.0F 12.2C | 7.2 | 95 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 7AF |
| 07/01/73 1500 | 5050 5050 | 5.24 98 | 12.5 155 | 71.6F 22.0C | 8.1 | 255 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF |
| 09/07/73 1020 | 5050 5050 | 4.73 23 | 12.3 134 | 59.9F 15.5C | 8.0 | 258 | -- | -- | 4.6 .20 7 | -- | 0 .00 | 145 2.38 | -- | 7.3 .21 | -- | .10 -- | -- | 126 0A 0.2 |

TABLE D-2 (Cont)

MINERAL ANALYSES OF SURFACE WATER

| DATE TIME | SAMPLER LAB | G.H. O DEPTH | DO SAT | TEMP FIELD PH EC | MINERAL CONSTITUENTS IN | | | | | | | | | | MILLIGRAMS PER LITER | | | | MILLIGRAMS PER LITER | | | |
|--|----------------|--------------------|-------------|---------------------------|-------------------------|------------|------------|------------|-----------------|------------------|-----------------|-------------|-----------------|---------------------------|----------------------|-------------|---------|------------|----------------------|-------------|-------------------|--|
| | | | | | CA | MG | NA | K | CO ₃ | HCO ₃ | SO ₄ | CL | NO ₃ | PERCENT REFRACTANCE VALUE | S102 | F | TDS SUM | TH NCH | TURB SAR | | | |
| F3 1100.00 Klamath River Near Klamath | | | | | | | | | | | | | | | | | | | | | | |
| 10/03/72 0830 | 5050 5000 | 5.41 3400 | 8.9 90 | 60.8F 16.0C | 7.6 7.0 | 231 230 | 20 1.00 | 9.5 .78 | 13 .57 | 2.1 .05 | 0 .00 | 115 1.88 | 17 .35 | 6.5 .18 | 1.3 .02 | .01 23.0 | .2 | 149 149 | 89 0 | 4A 0.6 | | |
| 11/13/72 1530 | 5050 5000 | 6.92 7420 | 10.4 93 | 50.9F 10.5C | 7.6 7.3 | 187 182 | 18 .90 | 8.0 .66 | 8.7 .38 | 1.4 .04 | 0 .00 | 97 1.59 | 12 .25 | 5.2 .15 | 1.9 .03 | .09 23.0 | .1 | 126 126 | 78 0 | 10A 0.4 | | |
| 12/04/72 1515 | 5050 5000 | 7.41 9140 | 11.7 96 | 44.6F 7.0C | 7.5 7.6 | 186 180 | 15 .75 | 7.6 .63 | 9.2 .40 | 1.5 .04 | 0 .00 | 89 1.46 | 13 .27 | 4.0 .11 | 2.4 .04 | .07 23.0 | .2 | 120 120 | 69 0 | 20A 0.5 | | |
| 01/16/73 1515 | 5050 5000 | 75900 | 11.5 95 | 44.6F 7.0C | 7.4 7.6 | 108 107 | 12 .60 | 4.6 .38 | 3.8 .17 | .7 .02 | 0 .00 | 59 1.46 | 6.3 .13 | 2.0 .06 | .6 .01 | .04 14.0 | .1 | 73 73 | 49 1 | 200A 0.2 | | |
| 02/05/73 1430 | 5050 5000 | 27100 | 11.7 97 | 45.5F 7.5C | 7.4 7.9 | 141 147 | 17 .85 | 6.0 .49 | 5.1 .22 | .9 .02 | 0 .00 | 77 1.26 | 9.7 .20 | 2.3 .06 | 1.0 .02 | .03 17.0 | .3 | 67 97 | 4 4 | 60A 0.3 | | |
| 03/05/73 1515 | 5050 5050 | 25400 | 10.1 85 | 46.4F 8.0C | 7.5 7.4 | 152 154 | 16 .80 | 7.0 .58 | 4.5 .20 | .8 .02 | 0 .00 | 83 1.36 | 9.0 .19 | 2.0 .06 | .5 .01 | .00 17.0 | .1 | 98 98 | 69 1 | 30A 0.2 | | |
| 04/02/73 1430 | 5050 5050 | 19300 | 11.1 96 | 48.2F 9.0C | 7.6 7.8 | 141 143 | 15 .75 | 6.4 .53 | 4.4 .19 | .8 .02 | 0 .00 | 78 1.28 | 8.3 .17 | 2.6 .07 | .1 .00 | .04 15.0 | .0 | 91 91 | 64 0 | 30A 0.2 | | |
| 05/22/73 1435 | 5050 5000 | 10300 | 9.9 102 | 62.6F 17.0C | 7.5 7.4 | 119 116 | 13 .65 | 5.2 .43 | 3.3 .14 | .7 .02 | 0 .00 | 66 1.08 | 5.6 .12 | 1.4 .04 | .0 .00 | .03 13.0 | .1 | 75 75 | 54 0 | 9A 0.2 | | |
| 06/20/73 0830 | 5050 5050 | 4400 | 9.1 96 | 64.4F 18.0C | 7.8 7.8 | 171 170 | 18 .90 | 6.9 .57 | 5.0 .22 | 1.2 .03 | 0 .00 | 95 1.56 | 9.7 .20 | 2.9 .08 | .0 .00 | .06 14.0 | .0 | 105 104 | 74 0 | 2E 0.3 | | |
| 07/09/73 1420 | 5050 5000 | 3020 | 9.9 110 | 69.8F 21.0C | 8.1 8.1 | 193 192 | 20 1.00 | 7.7 .63 | 7.1 .31 | 1.4 .04 | 0 .00 | 99 1.62 | 13 .27 | 4.1 .12 | .0 .00 | .06 13.0 | .0 | 115 115 | 82 1 | 3A 0.3 | | |
| 08/07/73 0945 | 5050 5050 | 2750 | 8.5 93 | 68.0F 20.0C | 7.7 8.2 | 206 205 | 21 1.05 | 8.4 .69 | 8.6 .37 | 1.5 .04 | 0 .00 | 107 1.75 | 12 .25 | 4.4 .12 | .0 .00 | .09 14.0 | .1 | 123 123 | 87 0 | 1A 0.4 | | |
| 09/12/73 0835 | 5050 5000 | 4.26 1900 | 9.8 103 | 64.4F 18.0C | 7.8 8.1 | 206 209 | 25 1.25 | 8.7 .72 | 9.2 .40 | 1.7 .04 | 0 .00 | 113 1.85 | 12 .25 | 5.2 .15 | .0 .00 | .08 16.0 | .2 | 134 133 | 98 6 | 2A 0.4 | | |
| F3 1220.01 Klamath River At Orleans | | | | | | | | | | | | | | | | | | | | | | |
| 10/02/72 1100 | 5050 | 2.57 2840 | 10.0 102 | 61 F 16 C | 7.9 | 232 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1A | |
| 11/13/72 1145 | 5050 5050 | 3.94 4500 | 11.5 102 | 49.1F 9.5C | 7.6 | 178 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 5AF | |
| 12/04/72 1130 | 5050 5050 | 4.54 5300 | 12.3 100 | 42.8F 6.0C | 7.8 | 179 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 5AF | |
| 01/16/73 1145 | 5050 5050 | 14.20 34600 | 12.5 101 | 42.8F 6.0C | 7.4 | 105 107 | -- | -- | 4.6 .20 | -- | 0 .00 | 52 .85 | -- | 5.6 .16 | -- | .00 -- | -- | -- | -- | -- | 50 120A 0.3 | |
| 02/05/73 1100 | 5050 5050 | 7.88 10600 | 12.7 103 | 42.8F 6.0C | 7.8 | 158 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 14AF | |
| 03/05/73 1145 | 5050 5050 | 7.72 10200 | 11.3 95 | 45.5F 7.5C | 7.4 | 161 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 6AF | |
| 04/02/73 1115 | 5050 5050 | 6.24 6500 | 11.5 96 | 45.0F 7.2C | 7.8 | 159 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2AF | |
| 05/22/73 1045 | 5050 5050 | 6.19 6770 | 10.4 103 | 58.1F 14.5C | 7.4 | 106 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 3AF | |
| 06/19/73 1050 | 5050 5050 | 2.92 2900 | 9.8 102 | 62.6F 17.0C | 7.8 | 171 169 | -- | -- | 7.2 .31 | -- | 0 .00 | 89 1.46 | -- | 2.9 .08 | -- | .00 -- | -- | -- | -- | -- | 70 1A 0.4 | |
| 07/09/73 1030 | 5050 5050 | 1.68 1820 | 10.0 113 | 69.8F 21.0C | 8.0 | 190 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2AF | |
| 08/06/73 1300 | 5050 5050 | 0.75 1430E | 10.1 119 | 74.3F 23.5C | 8.1 | 193 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF | |
| 09/11/73 1105 | 5050 5050 | 0.09 1260E | 11.4 125 | 67.1F 19.5C | 8.1 | 195 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF | |
| F3 1430.00 Klamath River Near Seiad Valley | | | | | | | | | | | | | | | | | | | | | | |
| 10/10/72 1130 | 5050 | 9.9 2180 | 10.1 101 | 58.1F 14.5C | 7.8 | 238 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 3A | |
| 11/03/72 1015 | 5050 5050 | 10.3 2260 | 10.3 97 | 51.8F 11.0C | 7.6 | 204 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 5AF | |

TABLE D-2 (Cont.)
MINERAL ANALYSES OF SURFACE WATER

| DATE TIME | SAMPLER LAB | G.H. Q DEPTH | DO SAT | TEMP FIELD LABORATORY PH EC | MINERAL CONSTITUENTS IN | | | | | | MILLIGRAMS PER LITER | | | | MILLIGRAMS PER LITER | | | | |
|--|----------------|--------------------|-------------|--------------------------------------|-------------------------|-----|-----|----|-----------------|------------------|----------------------|------------------|-----|------------------|----------------------|-----|----|-----------|--|
| | | | | | CA | MG | NA | K | CO ₂ | HCO ₃ | SO ₄ | CL | NOS | S | F | TDS | TH | TURB | |
| Klamath River Near Seiad Valley | | | | | | | | | | | | | | CONTINUED | | | | | |
| 12/13/72 1305 | 5050 5050 | 3400E | 12.5 94 | 35.6F 2.0C | 7.5 | 203 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | SAF | |
| 01/24/73 1055 | 5050 5050 | 4910 | 12.4 96 | 37.4F 3.0C | 7.6 | 206 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 12AF | |
| 02/20/73 1100 | 5050 5050 | 3640 | 12.0 98 | 41.0F 5.0C | 7.6 | 204 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | SAF | |
| 03/13/73 1545 | 5050 5050 | 4080 | 11.1 95 | 44.6F 7.0C | 7.9 | 218 | -- | -- | 16 .70 31 | -- | 0 .00 | 100 1.64 | -- | 4.5 .13 | -- | .00 | -- | 77 0.8 | |
| 04/11/73 1130 | 5050 5050 | 2690 | 10.0 94 | 51.8F 11.0C | 7.8 | 196 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2AF | |
| 05/16/73 1000 | 5050 5050 | 2800 | 9.5 97 | 58.1F 14.5C | 7.6 | 140 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 7AF | |
| 06/14/73 0930 | 5050 5050 | 1350 | 9.6 102 | 61.7F 16.5C | 7.9 | 216 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF | |
| 07/01/73 1400 | 5050 5050 | 1010 | 10.0 119 | 71.6F 22.0C | 8.2 | 234 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF | |
| 08/08/73 1045 | 5050 5050 | 828 | 10.8 128 | 71.6F 22.0C | 8.4 | 207 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2AF | |
| 09/07/73 0910 | 5050 5050 | 850E | 10.7 117 | 64.4F 18.0C | 8.4 | 208 | -- | -- | 17 .74 33 | -- | 0 .00 | 105 1.72 | -- | 6.8 .19 | -- | .20 | -- | 76 0.8 | |
| Klamath River Above Hamburg Reservoir Site | | | | | | | | | | | | | | | | | | | |
| 11/03/72 1000 | 5050 5050 | 4280E | 9.8 91 | 50.0F 10.0C | 7.4 | 197 | -- | -- | 16 .70 36 | -- | 0 .00 | 95 1.56 | -- | 4.4 .12 | -- | .10 | -- | 63 0.9 | |
| 01/24/73 1000 | 5050 5050 | 3410E | 12.3 95 | 36.5F 2.5C | 7.6 | 215 | -- | -- | 20 .87 37 | -- | 0 .00 | 94 1.54 85 | -- | 9.2 .26 14 | 1.0 .02 1 | .10 | -- | 74 1.0 | |
| 03/13/73 1450 | 5050 5050 | 3260E | 10.7 93 | 44.6F 7.0C | 7.7 | 226 | -- | -- | 19 .83 35 | -- | 0 .00 | 97 1.59 | -- | 5.4 .15 | -- | .00 | -- | 76 0.9 | |
| 05/16/73 0905 | 5050 5050 | 1130E | 9.0 98 | 62.6F 17.0C | 8.1 | 185 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 3AF | |
| 07/02/73 1315 | 5050 5050 | 760E | 10.6 127 | 71.6F 22.0C | 8.3 | 227 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF | |
| 09/07/73 0830 | 5050 5050 | 740E | 10.0 109 | 62.6F 17.0C | 8.1 | 208 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF | |
| Klamath River Below Iron Gate Dam | | | | | | | | | | | | | | | | | | | |
| 10/10/72 0915 | 5050 | 1800 | 5.4 56 | 57 14 | F C | 7.2 | 216 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 3AF | |
| 11/03/72 0830 | 5050 5050 | 2300 | 7.5 73 | 51.8F 11.0C | 7.4 | 165 | -- | -- | 14 .61 37 | -- | 0 .00 | 79 1.29 | -- | 2.2 .06 | -- | .10 | -- | 51 0.9 | |
| 12/13/72 1100 | 5050 5050 | 2960 | 11.7 90 | 35.6F 2.0C | 7.3 | 189 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 6AF | |
| 01/24/73 0830 | 5050 5050 | 3170 | 11.9 93 | 36.5F 2.5C | 7.2 | 199 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 8AF | |
| 02/20/73 0925 | 5050 5050 | 2440 | 11.1 92 | 40.1F 4.5C | 7.7 | 185 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 3AF | |
| 03/13/73 1330 | 5050 5050 | 3050 | 10.2 90 | 44.6F 7.0C | 7.4 | 208 | -- | -- | 18 .78 39 | -- | 0 .00 | 82 1.34 | -- | 3.7 .10 | -- | .00 | -- | 62 1.0 | |
| 04/11/73 1000 | 5050 5050 | 1380 | 11.8 115 | 51.8F 11.0C | 8.1 | 195 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 3AF | |
| 05/16/73 0755 | 5050 5050 | 1046 | 9.9 112 | 64.4F 18.0C | 8.0 | 153 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2AF | |
| 06/14/73 0755 | 5050 5050 | 750 | 9.9 112 | 64.4F 18.0C | 8.0 | 214 | -- | -- | 19 .83 38 | -- | 0 .00 | 96 1.57 | -- | 4.0 .11 | -- | .00 | -- | 69 1.0 | |
| 07/02/73 1150 | 5050 5050 | 745 | 12.6 148 | 68.0F 20.0C | 8.3 | 219 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2AF | |

TABLE D-2 (Cont.)
MINERAL ANALYSES OF SURFACE WATER

| DATE TIME | SAMPLER LAB | G.M. D DEPTH | DO SAT | TEMP | FIELD LABORATORY PH EC | MINERAL CONSTITUENTS IN CA MG NA K CO ₃ HC ₀₃ SO ₄ CL NO ₃ | MILLIGRAMS PER LITER | | | MILLIGRAMS PER LITER | | | | | | | |
|---|----------------|--------------------|-------------|----------------|------------------------------|---|----------------------------|------------------|------------------|-------------------------|----------|-------------------|-----------------|------------------|------------|-----------|-----------------------|
| | | | | | | | MILLIEQUIVALENTS PER LITER | | | PERCENT REACTANCE VALUE | | | B SI02 | F SUM | TDS NCH | TH NCH | TURB SAR |
| F3 1599.01 Klamath River Below Iron Gate Dam | | | | | | | | | | | | | | CONTINUED | | | |
| 08/08/73 0915 | 5050 5050 | 675 | 10.0 120 | 69.8F 21.0C | 9.0 | 176 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 3AF |
| 09/07/73 0700 | 5050 5050 | 720 | 8.8 97 | 62.6F 17.0C | 8.1 7.7 | 180 188 | -- | -- | 16 .70 37 | -- | 0 .00 | .89 1.46 | -- | 4.1 .12 | .20 | -- | 60 0.9 |
| F3 4100.00 Salmon River at Somesbar | | | | | | | | | | | | | | | | | |
| 10/02/72 1300 | 5050 5050 | 3.58 208 | 10.0 102 | 60.8F 16.0C | 7.9 7.8 | 150 151 | -- | -- | 3.7 .16 11 | -- | 0 .00 | .82 1.34 | -- | 3.7 .10 | .00 | -- | 68 0.2 |
| 06/19/73 1130 | 5050 5050 | 4.45 620 | 9.9 101 | 60.8F 16.0C | 7.8 7.9 | 93 94 | 12 .60 63 | 2.9 .24 25 | 1.9 .08 8 | 1.2 .03 3 | 0 .00 | .50 .82 80 | .89 .19 1 | .3 .01 0 | .10 | -- | 80 52 42 0.1 |
| F4 1080.00 Trinity River at Hoopa | | | | | | | | | | | | | | | | | |
| 10/02/72 1000 | 5050 | 14.06 650 | 8.8 90 | 61 F C | 7.8 | 219 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF |
| 11/13/72 1045 | 5050 5050 | 15.94 2080 | 10.7 93 | 48.2F 9.0C | 7.6 | 191 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 14AF |
| 12/04/72 1020 | 5050 5050 | 15.84 2000 | 11.6 95 | 43.7F 6.5C | 7.5 | 168 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 52AF |
| 01/16/73 1030 | 5050 5050 | 26.96 28800 | 11.8 98 | 44.6F 7.0C | 7.5 | 125 129 | -- | -- | 2.4 .10 7 | -- | 0 .00 | .68 1.11 92 | -- | 3.6 .10 8 | .3 .00 | .00 | 65 310A 0.1 |
| 02/05/73 0945 | 5050 5050 | 21.98 13200 | 12.0 97 | 42.8F 6.0C | 7.6 | 149 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 150AF |
| 03/05/73 1040 | 5050 5050 | 19.84 8500 | 10.5 88 | 45.5F 7.5C | 7.5 | 156 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 42AF |
| 04/02/73 1015 | 5050 5050 | 18.97 6500 | 10.9 90 | 46.6F 7.0C | 7.8 | 156 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 42AF |
| 05/22/73 0950 | 5050 5050 | 16.78 3100 | 10.0 100 | 59.0F 15.0C | 8.3 7.7 | 126 126 | -- | -- | 2.5 .11 8 | -- | 0 .00 | .70 1.15 | -- | 1.0 .03 | .00 | -- | 60 4A 0.1 |
| 06/19/73 0950 | 5050 5050 | 14.86 1460 | 9.6 98 | 60.8F 16.0C | 7.3 | 170 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF |
| 07/09/73 0935 | 5050 5050 | 13.96 890 | 9.7 85 | 48.6F 9.2C | 7.8 | 187 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF |
| 08/06/73 1135 | 5050 5050 | 13.25 500 | 9.3 111 | 75.2F 24.0C | 7.8 | 201 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0AF |
| 09/11/73 1005 | 5050 5050 | 13.19 470 | 11.1 120 | 66.2F 19.0C | 8.0 7.8 | 192 203 | -- | -- | 4.6 .20 9 | -- | 0 .00 | 106 1.74 | -- | 5.2 .15 | .10 | -- | 97 0A 0.2 |
| F4 1376.00 Trinity River Near Burnt Ranch | | | | | | | | | | | | | | | | | |
| 11/13/72 0945 | 5050 5050 | 11.2 845 | 47.3F 98 | 7.6 | 154 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 3AF |
| 01/16/73 0930 | 5050 5050 | 11.3 8160 | 11.3 95 | 43.7F 6.5C | 7.3 | 111 112 | -- | -- | 2.2 .10 8 | -- | 0 .00 | .60 .98 88 | -- | 4.7 .13 12 | .3 .00 | .00 | 59 100A 0.1 |
| 03/05/73 0945 | 5050 5050 | 10.7 2800 | 9.1 | 44.6F 7.0C | 7.9 | 155 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 4AF |
| 05/22/73 0900 | 5050 5050 | 9.9 1690 | 10.1 | 59.0F 15.0C | 7.3 | 93 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF |
| 07/09/73 0830 | 5050 5050 | 9.4 429 | 10.4 | 66.2F 19.0C | 7.8 | 141 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0AF |
| 09/11/73 0910 | 5050 5050 | 10.6 283 | 11.7 | 66.2F 19.0C | 7.8 7.5 | 144 152 | -- | -- | 4.4 .19 12 | -- | 0 .00 | .81 1.33 | -- | 6.2 .17 | .10 | -- | 68 0A 0.2 |
| F4 1640.00 Trinity River at Lewiston | | | | | | | | | | | | | | | | | |
| 11/13/72 0800 | 5050 5050 | 3.38 254 | 10.5 93 | 45.5F 7.5C | 7.3 | 83 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 50AF |
| 01/16/73 0800 | 5050 5050 | 3.05 168 | 11.0 91 | 41.0F 5.0C | 7.2 | 91 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 15AF |
| 03/05/73 0810 | 5050 5050 | 2.99 147 | 10.0 87 | 44.6F 7.0C | 7.6 | 90 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF |

TABLE D-2 (Cont)

MINERAL ANALYSES OF SURFACE WATER

| DATE TIME | SAMPLER LAB | G.H. O DEPTH | DO SAT | TEMP PH | FIELD LABORATORY EC | MINERAL CONSTITUENTS IN CA MG NA K CO ₃ HCO ₃ SO ₄ CL NO ₃ | MILLIGRAMS PER LITER | | | MILLIEQUIVALENTS PER LITER | | | MILLIGRAMS PER LITER | | |
|--------------------------------------|----------------|--------------------|---------------|----------------|---------------------------|---|---------------------------|------------------|------------------|----------------------------|------------------|-------------------|----------------------|-----------------|-------------------|
| | | | | | | | PERCENT REFRACTANCE VALUE | 8 | F | SiO ₂ | TDS SUM | TM NCH | TURB SAR | | |
| F4 1640.00 TRINITY RIVER AT LEWISTON | | | | | | | | | | | | | | | |
| 05/22/73 0715 | 5050 5050 | 3.02 153 | 10.9 99 | 47.3F 8.5C | 7.1 7.4 | 84 86 | -- -- 2.7 .12 .13 | -- 0 .00 | .50 .82 | -- .1 .00 | -- .00 -- | -- .00 -- | 39 0.2 | 0A 0.2 | |
| 07/09/73 0705 | 5050 5050 | 3.03 156 | 10.2 92 | 47.3F 8.5C | 7.2 8.1 | 83 85 | -- -- -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | 0AF | | |
| 09/11/73 0720 | 5050 5050 | 3.25 203 | 10.2 92 | 47.3F 8.5C | 7.2 8.1 | 82 85 | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | 1AF | | |
| 09/19/73 1005 | 5050 5050 | | 12.6 115 | 48.2F 9.0C | 7.1 8.1 | 90 85 | 4.8 .24 27 | 6.8 .56 62 | 1.9 .08 9 | .8 .02 2 | 0 .00 | 48 .79 84 | 4.9 .10 11 | 1.9 .05 5 | -- .00 -- .00 |
| 09/21/73 1400 | 5050 5050 | 3.24 115 | 12.3 10.0C | 50.0F 7.4 | 7.3 7.4 | 90 84 | -- -- -- -- | 2.0 .09 10 | -- 0 .00 | .49 .80 | -- 1.0 .03 | -- .10 -- .03 | -- .00 -- .00 | 40 0.1 | 0A 0.1 |
| CONTINUED | | | | | | | | | | | | | | | |
| F5 1100.00 MAD RIVER NEAR ARCATA | | | | | | | | | | | | | | | |
| 11/13/72 1345 | 5050 5050 | 4.76 420 | 10.6 96 | 51.8F 11.0C | 7.5 7.7 | 165 169 | -- -- 4.3 .19 11 | -- 0 .00 | .78 1.28 | -- 3.3 .09 | -- .10 -- .00 | -- .00 -- .00 | 74 0.2 | 44A 0.2 | |
| 01/16/73 1340 | 5050 5050 | 13.07 14800 | 10.9 93 | 47.3F 8.5C | 7.8 7.0 | 90 105 | -- -- 3.2 .14 11 | -- 0 .00 | .51 .84 | -- 5.6 .16 | -- .00 -- .00 | -- .00 -- .00 | 56 0.2 | 1100A 0.2 | |
| 03/05/73 1330 | 5050 5050 | 7.00 2450 | 10.8 93 | 48.2F 9.0C | 7.3 7.3 | 102 102 | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | 93AF | | |
| 05/22/73 1310 | 5050 5050 | 3.02 130 | 10.1 108 | 66.2F 19.0C | 7.6 7.6 | 185 185 | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | 1AF | | |
| 07/09/73 1235 | 5050 5050 | 2.22 43 | 10.3 115 | 69.8F 21.0C | 7.9 7.9 | 215 215 | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | 1AF | | |
| 09/11/73 1305 | 5050 5050 | 1.47 15 | 12.3 124 | 60.8F 16.0C | 8.0 8.0 | 198 198 | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | 1AF | | |
| F5 5100.00 REDWOOD CREEK AT ORICK | | | | | | | | | | | | | | | |
| 10/02/72 1415 | 5050 | 4.75 28 | 10.5 110 | 64 F 18 C | 7.7 7.7 | 206 206 | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | 1AF | | |
| 11/13/72 1430 | 5050 5050 | 5.66 296 | 10.5 95 | 51.8F 11.0C | 7.3 7.3 | 183 183 | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | 105AF | | |
| 12/04/72 1400 | 5050 5050 | 6.25 500 | 11.4 94 | 44.6F 7.0C | 7.4 7.2 | 143 148 | -- -- -- -- | 3.9 .17 12 | -- 0 .00 | .52 .85 | -- 3.8 .11 | -- .00 -- .00 | 63 0.2 | 250A 0.2 | |
| 01/16/73 1430 | 5050 5050 | 11.16 8690 | 11.1 96 | 48.2F 9.0C | 7.8 6.8 | 73 80 | -- -- -- -- | 2.9 .13 16 | -- 0 .00 | .30 .49 | -- 7.0 .20 | -- .00 -- .00 | 33 0.2 | 1200A 0.2 | |
| 02/05/73 1345 | 5050 5050 | 8.24 2700 | 11.3 98 | 48.2F 9.0C | 7.2 7.2 | 86 86 | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | 1100AF | | |
| 03/05/73 1430 | 5050 5050 | 7.51 1580 | 10.1 87 | 48.2F 9.0C | 7.2 7.2 | 92 92 | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | 75AF | | |
| 04/02/73 1335 | 5050 5050 | 8.09 2250 | 10.7 92 | 48.2F 9.0C | 7.4 7.4 | 84 84 | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | 180AF | | |
| 05/22/73 1355 | 5050 5050 | 5.51 106 | 10.0 106 | 65.3F 18.5C | 7.5 7.5 | 143 143 | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | 1AF | | |
| 06/19/73 1415 | 5050 5050 | 5.25 105 | 9.1 102 | 70.7F 21.5C | 7.5 7.5 | 165 160 | -- -- -- -- | 3.9 .17 11 | -- 0 .00 | .76 1.25 | -- 4.4 .12 | -- .00 -- .00 | 72 0.2 | 0A 0.2 | |
| 07/09/73 1355 | 5050 5050 | 5.00 109 | 9.7 109 | 70.7F 21.5C | 7.6 7.6 | 180 180 | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | 1AF | | |
| 08/06/73 1610 | 5050 5050 | 4.74 23 | 10.0 107 | 66.2F 19.0C | 7.3 7.3 | 182 182 | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | 1AF | | |
| 09/11/73 1400 | 5050 5050 | 4.59 12 | 11.8 121 | 62.6F 17.0C | 7.6 7.6 | 167 167 | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | -- -- -- -- | 1AF | | |
| F6 1100.00 EEL RIVER AT SCOTIA | | | | | | | | | | | | | | | |
| 10/03/72 1245 | 5050 5000 | 9.80 390 | 10.7 115 | 66.2F 19.0C | 8.0 7.4 | 297 298 | 38 1.90 61 | 10 .82 26 | 8.7 .38 12 | 1.4 .04 1 | 0 .00 | 136 2.23 72 | 30 .62 20 | 8.2 .23 7 | .02 .00 0.2 |
| 11/14/72 1300 | 5050 5000 | 13.69 8770 | 10.5 95 | 51.8F 11.0C | 7.4 7.2 | 166 162 | 19 .95 56 | 5.6 .46 27 | 6.1 .27 16 | .9 .02 1 | 0 .00 | 79 1.29 75 | 13 .27 16 | 5.3 .15 9 | .01 .02 1 |
| 12/05/72 1215 | 5050 5000 | 11.72 3290 | 11.9 98 | 44.6F 7.0C | 7.5 7.9 | 196 192 | 23 1.15 57 | 6.9 .57 28 | 6.2 .27 13 | .9 .02 1 | 0 .00 | 98 1.61 79 | 16 .33 16 | 4.0 .11 5 | .08 .00 0.1 |
| | | | | | | | | | | | | | | 115 115 6 | 86 9.4 0.3 |

TABLE D-2 (Cont.)

MINERAL ANALYSES OF SURFACE WATER

| DATE TIME | SAMPLER LAB | G.H. O DEPTH | DO SAT | TEMP FIELD PH | FIELD LABORATORY EC | MINERAL CONSTITUENTS IN MILLIEQUIVALENTS PER LITER | | | | | | | MILLIGRAMS PER LITER | | | | | | | |
|---|----------------|--------------------|-------------|---------------------|---------------------------|---|-----|------------------|------------------|------------------|------------------|-------------------|----------------------|-----------------|----------------|-------------|-----------|------------|-------------|-------------|
| | | | | | | CA | MG | NA | K | CO ₃ | HCO ₃ | SO ₄ | CL | NO ₃ | B | F | TOS | TH | TURB SAR | |
| F6 1100.00 EEL RIVER AT SCOTIA | | | | | | | | | | | | | | | CONTINUED | | | | | |
| 01/17/73 1230 | 5050 5000 | 105000 | 11.3 96 | 47.3F 8.5C | 7.9 | 102 | 12 | 3.1 .25 24 | 4.1 .18 17 | .8 .02 2 | 0 0.00 | 58 .95 85 | 5.3 .11 10 | 1.9 .05 4 | .4 .01 1 | .06 1 | .2 9.7 | 66 66 | 43 0 | 500A 0.3 |
| 02/06/73 1545 | 5050 5000 | 36100 | 11.0 95 | 48.2F 9.0C | 7.5 8.0 | 115 | 14 | 3.9 .32 26 | 4.5 .20 16 | .8 .02 2 | 0 0.00 | 67 1.10 83 | 7.0 .15 11 | 2.5 .07 5 | .2 .00 | .06 11.0 | .1 77 | 51 0 | 200A 0.3 | |
| 03/06/73 1215 | 5050 5050 | 17600 | 10.0 88 | 50.0F 10.0C | 7.4 7.4 | 152 | 16 | 5.6 .46 31 | 4.9 .21 14 | .8 .02 1 | 0 0.00 | 76 1.25 82 | 9.7 .20 13 | 3.0 .08 5 | .1 .00 | .04 11.0 | .1 89 | 63 1 | 80A 0.3 | |
| 04/03/73 1215 | 5050 | 9370 | 10.5 97 | 53.6F 12.0C | 7.4 7.8 | 148 | 17 | 5.7 .47 30 | 5.2 .23 15 | .9 .02 1 | 0 0.00 | 80 1.31 82 | 9.9 .19 12 | 3.3 .09 6 | .1 .00 | .08 11.0 | .0 92 | 66 1 | 30A 0.3 | |
| 05/23/73 1050 | 5050 5000 | 1610 | 9.7 104 | 66.2F 19.0C | 7.9 7.3 | 187 | 23 | 6.3 .52 27 | 5.3 .23 12 | .9 .02 1 | 0 0.00 | 103 1.69 85 | 11 .23 12 | 2.6 .07 4 | .1 .00 | .08 9.6 | .1 110 | 84 0 | 2A 0.3 | |
| 06/20/73 1215 | 5050 5050 | 517 | 11.2 140 | 81.5F 27.5C | 8.6 8.0 | 254 | 29 | 9.2 .76 29 | 8.2 .36 14 | 1.3 .03 1 | 0 0.00 | 129 2.11 80 | 15 .31 12 | 7.8 .22 8 | .0 .00 | .01 4.3 | .1 139 | 110 5 | 1E 0.3 | |
| 07/10/73 1115 | 5050 5000 | 169 | 10.7 119 | 69.8F 21.0C | 8.1 8.1 | 282 | 34 | 9.8 .81 28 | 8.2 .36 12 | 1.3 .03 1 | 0 0.00 | 150 2.46 80 | 19 .40 13 | 7.0 .20 7 | .0 .00 | .01 8.9 | .1 163 | 130 3 | 1A 0.3 | |
| 08/08/73 0655 | 5050 5050 | 110 | 8.0 86 | 66.2F 19.0C | 7.9 8.4 | 296 | 38 | 10 .82 60 | 9.2 .40 26 | 1.5 .04 13 | 2.0 .07 2 | 164 2.69 81 | 19 .40 12 | 5.3 .15 5 | .0 .00 | .01 7.4 | .1 174 | 140 0 | 1A 0.3 | |
| 09/12/73 1215 | 5050 5000 | 10.06 | 10.9 115 | 64.4F 18.0C | 7.9 8.3 | 312 | 43 | 12 .99 59 | 10 .44 27 | 1.7 .04 12 | 0 0.00 | 177 2.90 82 | 20 .42 12 | 7.5 .21 6 | .0 .00 | .01 7.6 | .2 190 | 160 12 | 2A 0.3 | |
| F6 1154.50 EEL RIVER AT SOUTH FORK | | | | | | | | | | | | | | | | | | | | |
| 10/03/72 1330 | 5050 | 150 | 9.3 100 | F 19 | 66 C | 318 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2AF | |
| 11/14/72 1400 | 5050 5050 | 7630 | 10.8 96 | 50.0F 10.0C | 7.6 7.8 | 165 | -- | -- | 5.2 .23 13 | -- | 0 .00 | 81 1.33 | -- | 2.8 .08 | -- | .10 -- | -- | 77 175A | 0.3 | |
| 12/05/72 1300 | 5050 5050 | 1390 | 11.9 96 | 42.8F 6.0C | 7.8 7.7 | 189 | -- | -- | 5.5 .24 12 | -- | 0 .00 | 94 1.54 | -- | 2.3 .06 | -- | .20 -- | -- | 86 12A | 0.3 | |
| 01/17/73 1310 | 5050 5050 | 49000 | 12.0 101 | 46.4F 8.0C | 8.0 7.5 | 850 | 16 | 3.2 .80 63 | 3.0 .26 21 | 2.9 .13 10 | 0 .07 6 | 64 1.05 89 | 5.6 .12 10 | .5 .01 1 | 0 .00 | .30 -- | -- | 72 63 | 53 250A | 0.2 |
| 02/06/73 1630 | 5050 5050 | 15800 | 11.5 100 | 48.2F 9.0C | 7.6 7.5 | 124 | -- | -- | 3.6 .16 12 | -- | 0 .00 | 68 1.11 | -- | 1.7 .05 | -- | .00 -- | -- | 59 230A | 0.2 | |
| 03/06/73 1315 | 5050 5050 | 10600 | 10.2 88 | 48.2F 9.0C | 7.6 8.4 | 142 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 96AF | | |
| 04/03/73 1320 | 5050 5050 | 5600 | 10.0 89 | 50.0F 10.0C | 7.6 7.6 | 153 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 4AF | | |
| 05/23/73 1145 | 5050 5050 | 1000 | 8.9 96 | 66.2F 19.0C | 7.6 8.4 | 165 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 3AF | | |
| 06/20/73 1320 | 5050 5050 | 220 | 9.8 114 | 73.4F 23.0C | 8.1 8.1 | 235 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF | | |
| 07/10/73 1205 | 5050 5050 | 86 | 9.4 105 | 69.8F 21.0C | 8.0 8.0 | 272 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF | | |
| 08/08/73 0720 | 5050 5050 | 93 | 8.3 90 | 67.1F 19.5C | 7.5 7.5 | 279 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0AF | | |
| 09/12/73 1305 | 5050 5050 | 27 | 11.2 126 | 70.7F 21.5C | 7.9 7.9 | 299 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF | | |
| F6 1329.50 EEL RIVER ABOVE OUTLET CREEK NEAR DOS RIOS | | | | | | | | | | | | | | | | | | | | |
| 10/04/72 0915 | 5050 | 2.33 9.0 | 8.6 93 | 64 18 | F C | 7.8 C | 283 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF | |
| 11/15/72 0900 | 5050 5050 | 3.74 410 | 10.5 94 | 48.2F 9.0C | 7.5 7.7 | 144 | -- | -- | 5.2 .23 16 | -- | 0 .00 | 77 1.26 | -- | 3.2 .09 | -- | .30 -- | -- | 60 24A | 0.3 | |
| 12/06/72 0925 | 5050 5050 | 2.94 118 | 12.3 94 | 37.4F 3.0C | 7.6 7.6 | 189 | -- | -- | 6.9 .30 15 | -- | 0 .00 | 94 1.54 | -- | 3.7 .10 | -- | .30 -- | -- | 82 6A | 0.3 | |
| 01/18/73 0945 | 5050 5050 | 13.74 13300 | 11.7 101 | 45.5F 7.5C | 7.4 7.1 | 86 | -- | -- | 3.2 .14 13 | -- | 0 .00 | 48 .79 | -- | 4.8 .14 | -- | .00 -- | -- | 47 330A | 0.2 | |
| 02/07/73 1040 | 5050 5050 | 7.60 3900 | 11.6 100 | 45.5F 7.5C | 7.4 7.4 | 111 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 120AF | | |

TABLE D-2 (CONT)

MINERAL ANALYSES OF SURFACE WATER

| DATE TIME | SAMPLER LAB | G.H. D DEPTH | DO SAT | TEMP PH | FIELD LABORATORY EC | MINERAL CONSTITUENTS IN CA MG NA K CO ₃ SO ₄ CL NO ₃ | MILLIGRAMS PER LITER | | | MILLIEQUIVALENTS PER LITER | | | PERCENT REACTANCE VALUE | | | MILLIGRAMS PER LITER | | | TURB SAR |
|---|----------------|--------------------|-------------|----------------|---------------------------|--|----------------------|----------|-------------------|----------------------------|-----------------------|------------------|-------------------------|-----------------------|-----------|----------------------|------------|-------------------|-------------|
| | | | | | | | B SI02 | F SUM | TDS NCH | TH NCH | CL NO ₃ | SI02 | TH NCH | CL NO ₃ | B SI02 | F SUM | TDS NCH | | |
| F6 1329.50 EEL RIVER ABOVE OUTLET CREEK NEAR DOS RIOS | | | | | | | | | | | | | | | | | | | |
| 03/07/73 0850 | 5050 5050 | 6.41 2700 | 10.3 89 | 45.5F 7.5C | 7.4 | 123 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 28AF |
| 04/04/73 0940 | 5050 5050 | 910 | 10.5 94 | 48.2F 9.0C | 7.4 | 145 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 6AF |
| 05/23/73 1700 | 5050 5050 | 61 | 9.6 114 | 72.5F 22.5C | 8.2 | 218 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF |
| 06/21/73 0825 | 5050 5050 | 20 | 7.5 90 | 73.4F 23.0C | 8.0 | 225 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0AF |
| 07/11/73 0730 | 5050 5050 | 9.0 | 8.3 99 | 73.4F 23.0C | 8.0 | 240 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0AF |
| 08/08/73 1030 | 5050 5050 | 23 | 9.2 112 | 75.2F 24.0C | 8.0 | 189 | -- | -- | 6.3 .27 .14 | -- | 0 .00 | 103 1.69 | -- | 2.7 .08 | -- | .30 | -- | 84 0.3 | |
| 09/13/73 0720 | 5050 5050 | 4E | 8.6 97 | 68.0F 20.0C | 7.8 | 239 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0AF |
| F6 1350.00 OUTLET CREEK NEAR LONGVALE | | | | | | | | | | | | | | | | | | | |
| 10/04/72 0845 | 5050 5050 | 1.30 4.0 | 8.7 | | 7.9 | 291 | -- | -- | 15 .65 .22 | -- | 0 .00 | 133 2.18 | -- | 18 .51 | -- | 2.20 | -- | 115 1A 0.6 | |
| 11/15/72 0815 | 5050 5050 | 3.33 449 | 10.7 95 | 48.2F 9.0C | 7.3 7.2 | 93 100 | -- | -- | 4.2 .18 .19 | -- | 0 .00 | 47 .77 | -- | 2.9 .08 | -- | .20 | -- | 39 58A 0.3 | |
| 12/06/72 0845 | 5050 5050 | 2.71 213 | 12.2 93 | 37.4F 3.0C | 7.4 7.3 | 130 135 | -- | -- | 6.1 .27 .21 | -- | 0 .00 | 62 1.02 | -- | 5.3 .15 | -- | .40 | -- | 52 9A 0.4 | |
| 01/18/73 0900 | 5050 5050 | 8.40 2700 | 10.8 94 | 46.4F 8.0C | 6.9 6.8 | 57 58 | -- | -- | 2.8 .12 .18 | -- | 0 .00 | 29 .48 | -- | 5.6 .16 | -- | .00 | -- | 28 120A 0.2 | |
| 02/07/73 1015 | 5050 5050 | 4.78 1250 | 10.9 97 | 48.2F 9.0C | 7.2 7.1 | 88 90 | -- | -- | 4.2 .18 .20 | -- | 0 .00 | 45 .74 | -- | 2.6 .07 | -- | .10 | -- | 35 22A 0.3 | |
| 03/07/73 0825 | 5050 5050 | 3.09 406 | 10.4 93 | 48.2F 9.0C | 7.2 | 94 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 28AF |
| 04/04/73 0910 | 5050 5050 | 3.64 643 | 10.6 95 | 48.2F 9.0C | 7.4 | 119 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 5AF |
| 05/23/73 1720 | 5050 5050 | 1.48 19 | 11.0 124 | 68.0F 20.0C | 8.2 | 216 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF |
| 06/21/73 0755 | 5050 5050 | 1.25 6.0 | 6.9 81 | 71.6F 22.0C | 8.0 | 257 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF |
| 07/11/73 0710 | 5050 5050 | 1.07 2.0 | 7.0 80 | 68.9F 20.5C | 7.9 | 269 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF |
| 08/08/73 1015 | 5050 5050 | 0.98 1.0 | 9.7 116 | 73.4F 23.0C | 8.0 | 294 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF |
| 09/13/73 0655 | 5050 5050 | 0.96 1.0 | 9.0 96 | 62.6F 17.0C | 8.0 | 310 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0AF |
| F6 3009.01 EEL RIVER MIDDLE FORK AT DOS RIOS | | | | | | | | | | | | | | | | | | | |
| 10/04/72 1000 | 5050 | 7.81 23 | 9.4 101 | 63.5F 17.5C | 8.0 | 339 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0AF |
| 11/15/72 0930 | 5050 5050 | 9.89 1220 | 11.5 97 | 44.6F 7.0C | 7.5 7.8 | 155 168 | -- | -- | 4.2 .18 .11 | -- | 0 .00 | 81 1.33 | -- | 2.0 .06 | -- | .10 | -- | 74 22A 0.2 | |
| 12/06/72 1015 | 5050 5050 | 8.74 440 | 13.1 98 | 36.5F 2.5C | 7.4 | 160 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 5AF |
| 01/18/73 1030 | 5050 5050 | 15.44 19900 | 11.9 101 | 44.6F 7.0C | 7.7 7.4 | 103 115 | -- | -- | 2.7 .12 .10 | -- | 0 .00 | 61 1.00 91 | -- | 3.7 .10 .9 | .2 .00 | .00 | -- | 54 600A 0.2 | |
| 02/07/73 1130 | 5050 5050 | 11.38 4800 | 11.6 99 | 45.0F 7.2C | 7.6 | 148 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 160AF |
| 03/07/73 0930 | 5050 5050 | 11.29 2750 | 11.5 95 | 42.8F 6.0C | 7.9 | 161 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 62AF |
| 04/04/73 1005 | 5050 5050 | 10.68 2140 | 11.0 95 | 46.4F 8.0C | 7.6 | 155 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 29AF |

TABLE D-2 (Cont)

MINERAL ANALYSES OF SURFACE WATER

| DATE TIME | SAMPLER LAB | G.H. O DEPTH | DO SAT | TEMP | FIELD LABORATORY | | MINERAL CONSTITUENTS IN | | | | | MILLIGRAMS PER LITER | | | | MILLIGRAMS PER LITER | | | |
|--|----------------|--------------------|-------------|----------------|---------------------|-----|-------------------------|----|-------------------|----|-----------------|----------------------|-----------------|------------------|-----------------|----------------------|----|----------------|-----------|
| | | | | | PH | EC | CA | MG | NA | K | CO ₃ | HCO ₃ | SO ₄ | CL | NO ₃ | B | F | TOS SUM | TH NCH |
| F6 3009.01 EEL RIVER MIDDLE FORK AT DOS RIOS | | | | | | | | | | | | | | | | | | | |
| 05/23/73 1420 | 5050 5050 | 9.06 1010 | 9.5 103 | 64.4F 18.0C | 7.6 | 132 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 4AF |
| 06/21/73 0850 | 5050 5050 | 7.07 175 | 8.7 99 | 68.9F 20.5C | 8.0 | 223 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF |
| 07/11/73 0805 | 5050 5050 | 6.53 53 | 9.4 107 | 68.9F 20.5C | 8.1 | 266 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0AF |
| 08/08/73 1110 | 5050 5050 | 6.02 1.0 | 10.0 121 | 75.2F 24.0C | 8.2 | 288 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0AF |
| 09/13/73 0750 | 5050 5050 | 6.14 12 | 10.2 110 | 64.4F 18.0C | 7.9 | 279 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0AF |
| CONTINUED | | | | | | | | | | | | | | | | | | | |
| F6 3050.00 MILL CREEK NEAR COVELO | | | | | | | | | | | | | | | | | | | |
| 11/15/72 1030 | 5050 5050 | 11.0 30E | 9.3 | 43.7F 6.5C | 7.4 | 158 | -- | -- | 5.4 .23 .14 | -- | 0 .00 | 82 1.34 94 | -- | 2.7 .08 6 | .7 .01 1 | .10 | -- | 72 13A 0.3 | |
| 12/06/72 1115 | 5050 5050 | 12.3 8E | 9.5 | 37.4F 3.0C | 7.5 | 160 | -- | -- | 8.7 .38 .14 | -- | 0 .00 | 141 2.31 | -- | 6.1 .17 | -- | .10 | -- | 118 0A 0.3 | |
| 01/18/73 1130 | 5050 5050 | 10.6 650E | 9.2 | 45.5F 7.5C | 7.2 | 90 | -- | -- | 3.0 .13 .11 | -- | 0 .00 | 51 .84 83 | -- | 6.1 .17 17 | .1 .00 | .10 | -- | 51 340A 0.2 | |
| 02/07/73 1215 | 5050 5050 | 10.4 180E | 9.4 | 48.2F 9.0C | 7.3 | 154 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 28AF | |
| 03/07/73 1030 | 5050 5050 | 10.8 130E | 9.0 | 42.8F 6.0C | 7.4 | 180 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 16AF | |
| 04/04/73 1100 | 5050 5050 | 10.0 100E | 9.3 | 50.9F 10.5C | 7.4 | 223 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 3AF | |
| 05/23/73 1510 | 5050 5050 | 8.5 SE | 104 | 75.2F 24.0C | 7.8 | 370 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF | |
| 06/21/73 0945 | 5050 5050 | 7.0 4E | 84 | 73.4F 23.0C | 7.6 | 378 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF | |
| F6 3200.00 BLACK BUTTE RIVER NEAR COVELO | | | | | | | | | | | | | | | | | | | |
| 10/04/72 1115 | 5050 | 12.84 56 | 10.5 120 | 68 20 | F C | 8.0 | 325 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0AF |
| 11/15/72 1145 | 5050 5050 | 13.71 136 | 11.4 97 | 43.7F 6.5C | 7.6 | 176 | -- | -- | 3.9 .17 .10 | -- | 0 .00 | 78 1.28 | -- | 1.0 .03 | -- | .10 | -- | 80 8A 0.2 | |
| 12/06/72 1300 | 5050 5050 | 13.26 90 | 13.0 99 | 36.5F 2.5C | 7.4 | 165 | -- | -- | 3.8 .17 .10 | -- | 0 .00 | 76 1.25 | -- | 2.0 .06 | -- | .10 | -- | 74 2A 0.2 | |
| 01/18/73 1230 | 5050 5050 | 16.24 3010 | 12.0 98 | 41.0F 5.0C | 7.6 | 104 | -- | -- | 2.4 .10 .8 | -- | 0 .00 | 55 .90 | -- | 3.7 .10 | -- | .00 | -- | 56 500A 0.1 | |
| 02/07/73 1315 | 5050 5050 | 13.36 600 | 11.5 98 | 43.7F 6.5C | 7.6 | 142 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 60AF | |
| 03/07/73 1115 | 5050 5050 | 13.17 480 | 11.2 91 | 40.1F 4.5C | 7.4 | 161 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 35AF | |
| 04/04/73 1145 | 5050 5050 | 13.10 380 | 10.8 94 | 45.5F 7.5C | 7.5 | 146 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 17AF | |
| 05/23/73 1610 | 5050 5050 | 12.52 150 | 9.0 97 | 62.6F 17.0C | 7.6 | 129 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2AF | |
| 06/21/73 1035 | 5050 5050 | 11.65 26 | 8.3 97 | 69.8F 21.0C | 8.1 | 204 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF | |
| 07/11/73 0920 | 5050 5050 | 11.45 18 | 9.3 110 | 70.7F 21.5C | 8.1 | 241 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF | |
| 08/08/73 1220 | 5050 5050 | 11.20 10 | 8.8 111 | 77.0F 25.0C | 8.0 | 272 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0AF | |
| 09/13/73 0855 | 5050 5050 | 11.44 3.0 | 10.0 110 | 64.4F 18.0C | 7.9 | 290 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF | |

TABLE D-2 (Cont.)

MINERAL ANALYSES OF SURFACE WATER

| DATE TIME | SAMPLER LAB | G.H. O DEPTH | DO SAT | TEMP PH | FIELD LABORATORY EC | MINERAL CONSTITUENTS IN | | | | | | MILLIGRAMS PER LITER | | | MILLIGRAMS PER LITER | | | | |
|--|----------------|--------------------|-------------|----------------|---------------------------|-------------------------|-----|----|------------------|------------------|------------------|----------------------|--------------|-----------------|----------------------|-----|-------------------------|------------------|-----------------|
| | | | | | | CA | MG | NA | K | CO ₃ | HCO ₃ | SO ₄ | CL | NO ₃ | B | F | TOS SiO ₂ | TH SUM | NCH |
| F6 4100.00 EEL RIVER SOUTH FORK NEAR MIRANDA | | | | | | | | | | | | | | | | | | | |
| 10/03/72 1415 | 5050 | 3.72 90 | 11.6 130 | 70 21 | F C | 8.1 | 255 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0AF |
| 11/14/72 1430 | 5050 5050 | 7.29 2790 | 10.4 94 | 50.9F 10.5C | 7.4 7.7 | 127 | 131 | -- | -- | 5.4 .23 18 | -- | .00 | 1.63 1.03 | -- | .37 .10 | -- | .10 | -- | 52 90A .3 |
| 12/05/72 1345 | 5050 5050 | 5.36 720 | 12.7 105 | 44.6F 7.0C | 7.8 | 159 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 6AF |
| 01/17/73 1345 | 5050 5050 | 13.93 20200 | 11.0 96 | 48.2F 9.0C | 7.4 | 90 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 540AF |
| 02/06/73 1700 | 5050 5050 | 9.77 7700 | 10.7 95 | 50.0F 10.0C | 7.3 | 107 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 210AF |
| 03/06/73 1350 | 5050 5050 | 8.18 4280 | 10.2 91 | 50.0F 10.0C | 7.3 | 112 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 80AF |
| 04/03/73 1400 | 5050 5050 | 6.71 1860 | 10.3 94 | 51.8F 11.0C | 7.3 | 125 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 16AF |
| 05/23/73 1220 | 5050 5050 | 4.48 125 | 11.5 125 | 67.1F 19.5C | 8.2 | 192 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0AF |
| 06/20/73 1400 | 5050 5050 | 4.14 142 | 11.1 133 | 76.1F 24.5C | 8.7 | 208 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF |
| 07/10/73 1245 | 5050 5050 | 3.93 110 | 11.6 133 | 71.6F 22.0C | 8.6 | 229 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF |
| 08/08/73 0845 | 5050 5050 | 3.72 49 | 7.0 78 | 68.9F 20.5C | 8.2 | 209 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF |
| 09/12/73 1340 | 5050 5050 | 3.90 85 | 14.2 159 | 69.8F 21.0C | 8.2 | 223 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1AF |
| F6 5279.00 VAN DUZEN RIVER NEAR BRIDGEVILLE | | | | | | | | | | | | | | | | | | | |
| 10/03/72 1145 | 5050 5050 | 4.64 34 | 9.9 103 | 62.6F 17.0C | 7.8 7.9 | 259 | -- | -- | 7.0 .30 11 | -- | 0 .00 | 126 2.07 | -- | 4.7 .13 | -- | .10 | -- | 116 0A .3 | |
| 11/14/72 1200 | 5050 5050 | 8.91 1330 | 11.2 97 | 47.3F 8.5C | 7.4 7.5 | 120 | -- | -- | 3.4 .15 12 | -- | 0 .00 | 58 .95 | -- | 1.4 .04 | -- | .10 | -- | 56 90A .2 | |
| 12/05/72 1130 | 5050 5050 | 5.64 290 | 12.7 99 | 40.1F 4.5C | 7.6 | 160 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 10AF |
| 01/17/73 1130 | 5050 5050 | 9.78 5420 | 11.8 98 | 44.6F 7.0C | 7.4 | 90 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 480AF |
| 02/06/73 1500 | 5050 5050 | 8.04 3100 | 11.7 100 | 46.4F 8.0C | 7.2 7.4 | 99 | -- | -- | 3.0 .13 13 | -- | 0 .00 | 53 .87 | -- | 1.1 .03 | -- | .00 | -- | 44 99A .2 | |
| 03/06/73 1115 | 5050 5050 | 6.69 1450 | 11.0 93 | 45.5F 7.5C | 7.3 | 112 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 78AF |
| 04/03/73 1115 | 5050 5050 | 6.10 930 | 11.0 94 | 46.4F 8.0C | 7.4 | 116 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 15AF |
| 05/23/73 0945 | 5050 5050 | 4.17 108 | 10.0 104 | 62.6F 17.0C | 7.7 | 174 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0AF |
| 06/20/73 1120 | 5050 5050 | 3.75 46 | 9.3 103 | 68.0F 20.0C | 8.1 | 211 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0AF |
| 07/10/73 1020 | 5050 5050 | 3.49 25 | 9.4 102 | 66.2F 19.0C | 7.9 | 246 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0AF |
| 08/07/73 1625 | 5050 5050 | 3.29 11 | 10.0 118 | 74.3F 23.5C | 8.1 | 267 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0AF |
| 09/12/73 1125 | 5050 5050 | 3.23 8.0 | 10.4 111 | 64.4F 18.0C | 7.8 | 280 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0AF |
| F7 1100.00 MATTOLE RIVER NEAR PETROLIA | | | | | | | | | | | | | | | | | | | |
| 02/06/73 1245 | 5050 5050 | 8.26 5320 | 10.8 97 | 50.9F 10.5C | 7.2 7.2 | 105 | -- | -- | 5.3 .23 22 | -- | 0 .00 | 50 .82 | -- | 4.0 .11 | -- | .00 | -- | 40 130A .4 | |
| 08/07/73 1350 | 5050 5050 | 3.20 30 | 12.7 147 | 73.4F 23.0C | 8.1 8.0 | 227 | -- | -- | 8.4 .37 15 | -- | 0 .00 | 108 1.77 | -- | 4.0 .11 | -- | .10 | -- | 101 0A .4 | |

TABLE D-2 (Cont.)
MINERAL ANALYSES OF SURFACE WATER

| DATE TIME | SAMPLER LAB | G.H. O DEPTH | 00 SAT | TEMP | FIELD LABORATORY | | | MINERAL CONSTITUENTS IN | | | | | | MILLIGRAMS PER LITER | | | MILLIGRAMS PER LITER | | | |
|------------------------------------|----------------|--------------------|-------------|----------------|---------------------|------------|----|-------------------------|------------------|----|----------|-----------------|------------------|----------------------|----|-----------------|----------------------|------------|------------|-----------|
| | | | | | PH | EC | | CA | MG | NA | K | CO ₃ | HCO ₃ | SO ₄ | CL | NO ₃ | B SI02 | F SUM | TOS NCH | TH NCH |
| F7 5100.00 BEAR RIVER AT CAPE TOWN | | | | | | | | | | | | | | | | | | | | |
| 02/06/73 1200 | 5050 5050 | 300E | 11.0 95 | 48.2F 9.0C | 7.2 | 148 156 | -- | -- | 8.2 .36 25 | -- | 0 .00 | 56 .92 | -- | 8.8 .25 | -- | .10 -- | -- | 55 0.5 | | |
| 08/07/73 1305 | 5050 5050 | 20E | 11.4 130 | 71.6F 22.0C | 8.0 | 278 283 | -- | -- | 10 .44 15 | -- | 0 .00 | 120 1.97 | -- | 7.7 .22 | -- | .10 -- | -- | 125 0.4 | | |

TABLE D-3

MINOR ELEMENT ANALYSIS OF SURFACE WATER

Lab and Sampler Agency Codes

5000 - U. S. Geological Survey

5050 - Department of Water Resources

Abbreviations

- TIME - Pacific Standard Time on a 24-hour clock
- DISCH - Instantaneous discharge in cubic feet per second
- EC - Electrical conductance in micromhos at 25° Celsius
- TEMP - Water temperature at time of sampling in degrees Fahrenheit (F) and Celsius (C)
- PH - Measure of acidity (<7) or alkalinity (>7) of water
- CHROM (ALL) - All chromium
- CHROM (HEX) - Hexavalent chromium
- D - Dissolved
- T - Total

TABLE D-3
MINOR ELEMENT ANALYSIS OF SURFACE WATER

| DATE TIME | SAMP LAB | DEPTH | DISCH EC | TEMP PH | CONSTITUENTS IN MILLIGRAMS PER LITER | | | | | | | | | | | |
|------------------|--------------|-------|-------------|--------------|--|--------|-------------|--------|------|-------|-----------|---------|----------|--------|------|------|
| | | | | | ARSENIC | BARIUM | CHROM (ALL) | COPPER | IRON | LEAD | MANGANESE | MERCURY | SELENIUM | SILVER | ZINC | |
| | | | F2 | 1050.00 | SHASTA RIVER NEAR YREKA | | | | | | | | | | | |
| 03/13/73 1405 | 5050 5050 | | | 8.0C 8.2 | 0.00 | T | 0.00 | T | -- | 0.00 | T | 0.01 | T | -- | -- | -- |
| 09/07/73 1115 | 5050 5050 | 675 | | 18.0C 8.3 | -- | | 0.00 | D | -- | 0.00 | D | 0.00 | D | -- | -- | 0.00 |
| | | | F2 | 5250.00 | SCOTT RIVER NEAR FORT JONES | | | | | | | | | | | |
| 03/13/73 1645 | 5050 5050 | | | 7.0C 7.5 | 0.00 | T | 0.00 | T | -- | 0.00 | T | 0.01 | T | -- | -- | 0.01 |
| | | | F3 | 1100.00 | KLAMATH RIVER NEAR KLAMATH | | | | | | | | | | | |
| 03/05/73 1515 | 5050 5050 | 152 | | 8.0C 7.5 | -- | | -- | | -- | 0.02 | D | -- | -- | -- | -- | -- |
| 04/02/73 1430 | 5050 5050 | 141 | | 9.0C 7.6 | -- | | -- | | -- | 0.02 | D | -- | -- | -- | -- | -- |
| 05/22/73 1435 | 5050 5000 | 119 | | 17.0C 7.5 | -- | | -- | | -- | 0.030 | D | -- | -- | -- | -- | -- |
| 06/20/73 0830 | 5050 5050 | 171 | | 18.0C 7.8 | -- | | -- | | -- | 0.010 | D | -- | -- | -- | -- | -- |
| 07/09/73 1420 | 5050 5000 | 3020 | | 21.0C 8.1 | -- | | -- | | -- | 0.010 | D | -- | -- | -- | -- | -- |
| 08/07/73 0945 | 5050 5050 | 2750 | | 20.0C 7.7 | -- | | -- | | -- | 0.010 | D | -- | -- | -- | -- | -- |
| 09/12/73 0835 | 5050 5000 | 1900 | | 18.0C 7.8 | -- | | -- | | -- | 0.01 | D | -- | -- | -- | -- | -- |
| | | | F3 | 1430.00 | KLAMATH RIVER NEAR SEIAD VALLEY | | | | | | | | | | | |
| 03/13/73 1545 | 5050 5050 | | | 7.0C 7.9 | 0.00 | T | 0.00 | T | -- | 0.00 | T | 0.01 | T | -- | -- | 0.03 |
| | | | F3 | 1470.00 | KLAMATH RIVER ABOVE HAMBURG RESERVOIR SITE | | | | | | | | | | | |
| 03/13/73 1450 | 5050 5050 | | | 7.0C 7.7 | 0.00 | T | 0.00 | T | -- | 0.00 | T | 0.02 | T | -- | -- | 0.01 |
| | | | F3 | 1599.01 | KLAMATH RIVER BELOW IRON GATE DAM | | | | | | | | | | | |
| 03/13/73 1330 | 5050 5050 | | | 7.0C 7.4 | 0.00 | T | 0.00 | T | -- | 0.00 | T | 0.01 | T | -- | -- | 0.01 |
| | | | F4 | 1640.00 | TRINITY RIVER AT LEWISTON | | | | | | | | | | | |
| 09/19/73 1005 | 5050 5050 | 90 | | 9.0C 7.1 | -- | | 0.00 | D | -- | 0.00 | D | 0.01 | D | -- | -- | 0.00 |
| | | | F6 | 1100.00 | EEL RIVER AT SCOTIA | | | | | | | | | | | |
| 03/06/73 1215 | 5050 | 152 | | 10.0C 7.4 | -- | | -- | | -- | 0.04 | D | -- | -- | -- | -- | -- |
| 04/03/73 1215 | 5050 5050 | 148 | | 12.0C 7.4 | -- | | -- | | -- | 0.05 | D | -- | -- | -- | -- | -- |
| 05/23/73 1050 | 5050 5000 | 187 | | 19.0C 7.9 | -- | | -- | | -- | 0.09 | D | -- | -- | -- | -- | -- |
| 06/20/73 1215 | 5050 5050 | 254 | | 27.5C 8.6 | -- | | -- | | -- | 0.020 | D | -- | -- | -- | -- | -- |
| 07/10/73 1115 | 5050 5000 | 169 | | 21.0C 8.1 | -- | | -- | | -- | 0.010 | D | -- | -- | -- | -- | -- |
| 08/08/73 0655 | 5050 5050 | 282 | | 19.0C 7.9 | -- | | -- | | -- | 0.010 | D | -- | -- | -- | -- | -- |
| 09/12/73 1215 | 5050 5000 | 110 | | 18.0C 7.9 | -- | | -- | | -- | 0.00 | D | -- | -- | -- | -- | -- |
| | | 312 | | | -- | | -- | | -- | 0.00 | D | -- | -- | -- | -- | -- |

TABLE D-3 (Cont.)
SUPPLEMENTAL MINOR ELEMENT ANALYSIS OF SURFACE WATER

| DATE TIME | SAMP LAB | DEPTH | DISCH EC | TEMP PH | CONSTITUENTS IN MILLIGRAMS PER LITER | | | | | | | | | | | |
|------------------|--------------|-------|-------------|--------------|--------------------------------------|-----------------------|-------------------|----------------------|-----------------------|---------------------|---------------------|--------|---|----|--|--|
| | | | | | ALUMINUM | ANTIMONY BERYLLIUM | BISMUTH COBALT | GALLIUM GERMANIUM | LITHIUM MOLYBDENUM | NICKEL STRONTIUM | TITANIUM VANADUM | | | | | |
| | | | | | KLAHATH RIVER NEAR KLAHATH | | | | | | | | | | | |
| 03/05/73 1515 | 5050 5050 | | 152 | 8.0C 7.5 | -- | -- | -- | -- | 0.00 | 0 | -- | 0.08 | 0 | -- | | |
| 04/02/73 1430 | 5050 5050 | | 141 | 9.0C 7.6 | -- | -- | -- | -- | 0.00 | 0 | -- | 0.11 | 0 | -- | | |
| 05/22/73 1435 | 5050 5000 | | 119 | 17.0C 7.5 | -- | -- | -- | -- | 0.00 | 0 | -- | 0.080 | 0 | -- | | |
| 06/20/73 0820 | 5050 5050 | | 171 | 18.0C 7.8 | -- | -- | -- | -- | 0.00 | 0 | -- | 0.0130 | 0 | -- | | |
| 07/20/73 1420 | 5050 5000 | | 3020 | 21.0C 8.1 | -- | -- | -- | -- | 0.00 | 0 | -- | 0.0150 | 0 | -- | | |
| 08/07/73 0945 | 5050 5050 | | 2750 | 20.0C 7.7 | -- | -- | -- | -- | 0.00 | 0 | -- | 0.0140 | 0 | -- | | |
| 09/12/73 0835 | 5050 5000 | | 1900 | 18.0C 7.8 | -- | -- | -- | -- | 0.00 | 0 | -- | 0.01 | 0 | -- | | |
| | | | | | EEL RIVER AT SCOTIA | | | | | | | | | | | |
| 03/06/73 1215 | 5050 | | 152 | 10.0C 7.4 | -- | -- | -- | -- | 0.00 | 0 | -- | 0.17 | 0 | -- | | |
| 04/03/73 1215 | 5050 | | 148 | 12.0C 7.4 | -- | -- | -- | -- | 0.00 | 0 | -- | 0.20 | 0 | -- | | |
| 05/23/73 1050 | 5050 5000 | | 187 | 19.0C 7.9 | -- | -- | -- | -- | 0.00 | 0 | -- | 0.0290 | 0 | -- | | |
| 06/20/73 1215 | 5050 | | 254 | 27.5C 8.6 | -- | -- | -- | -- | 0.00 | 0 | -- | 0.0380 | 0 | -- | | |
| 07/10/73 1115 | 5050 5000 | | 169 | 21.0C 8.1 | -- | -- | -- | -- | 0.00 | 0 | -- | 0.0430 | 0 | -- | | |
| 08/08/73 0655 | 5050 | | 110 | 19.0C 7.9 | -- | -- | -- | -- | 0.00 | 0 | -- | 0.0430 | 0 | -- | | |
| 09/12/73 1215 | 5050 5000 | | 312 | 18.0C 7.9 | -- | -- | -- | -- | 0.00 | 0 | -- | 0.048 | 0 | -- | | |

TABLE D-4

PESTICIDES IN SURFACE WATER

All samples were collected and analyzed for pesticides by the Department of Water Resources (5050).

All samples were analyzed for two groups of pesticides, chlorinated organic compounds and organic phosphorus compounds. All pesticides detected are included in Table D-4. Other pesticides in these groups were absent or below detectable levels.

Pesticides

BHC - Benzene hexachloride

DDT - Dichloro diphenyl trichloroethane

ppDDD - Para para isomer of dichloro diphenyl dichloroethane

ppDDT - Para para isomer of dichloro diphenyl trichloroethane

When two pesticides are reported together with a slash mark separating them (ppDDE/Dieldrin, Simazine/Atrazine, etc.), the reported concentration is an undifferentiated total of the two. Either of the two pesticides could make up the entire total.

TABLE D-4

PESTICIDES IN SURFACE WATER
COMPOUNDS REPORTED IN NANOGRAMS/LITER

| DATE TIME | SAMP LAB | TEMP EC | DO PH | G.H. DISCHARGE | CHLORINATED HYDROCARBON | ORGANIC PHOSPHORUS | OTHER |
|--|-------------|------------|----------|-------------------|-------------------------|--------------------|---------------|
| F2 1050.00 SHASTA RIVER NEAR YREKA | | | | | | | |
| 03/13/73 1405 | 5050 | 8.0C | 8.8 | 3.48 | NONE DETECTED | NONE DETECTED | |
| | 5050 | | | R.2 | | | |
| F2 1055.00 SHASTA RIVER ABOVE YREKA CREEK | | | | | | | |
| 05/16/73 1220 | 5050 | 21.0C | 8.8 | | 75 UNKNOWNNS | NONE DETECTED | |
| | 5050 | 715 | R.0 | | | | |
| F2 1056.00 YREKA CREEK AROVE SHASTA RIVER | | | | | | | |
| 05/16/73 1200 | 5050 | 20.5C | 8.8 | | 70 UNKNOWNNS | NONE DETECTED | |
| | 5050 | 595 | R.3 | | | | |
| F2 1151.00 SHASTA RIVER ABOVE LITTLE SHASTA RIVER | | | | | | | |
| 05/16/73 0900 | 5050 | 18.5C | 7.8 | | 50 UNKNOWNNS | NONE DETECTED | |
| | 5050 | 615 | R.7 | | | | |
| F2 1200.00 LITTLE SHASTA RIVER NEAR BALL MOUNTAIN ROAD | | | | | | | |
| 05/16/73 0815 | 5050 | 14.0C | 9.1 | | NONE DETECTED | NONE DETECTED | |
| | 5050 | 135 | R.5 | | | | |
| F2 1399.00 SHASTA RIVER BELOW DWINNELL RESERVOIR | | | | | | | |
| 05/16/73 0730 | 5050 | 13.5C | 8.0 | | 15 DIELDRIN | 40 UNKNOWNNS | NONE DETECTED |
| | 5050 | 295 | R.5 | 3.0 | | | |
| F2 5250.00 SCOTT RIVER NEAR FORT JONES | | | | | | | |
| 03/13/73 1645 | 5050 | 7.0C | 10.5 | 6.25 | NONE DETECTED | NONE DETECTED | |
| | 5050 | | | 7.5 | | | |
| F3 1430.00 KLAMATH RIVER NEAR SEIAD VALLEY | | | | | | | |
| 03/13/73 1545 | 5050 | 7.0C | 11.1 | | NONE DETECTED | NONE DETECTED | |
| | 5050 | | | 7.9 | | | |
| F3 1470.00 KLAMATH RIVER ABOVE HAMBURG RESERVOIR SITE | | | | | | | |
| 03/13/73 1450 | 5050 | 7.0C | 10.7 | | NONE DETECTED | NONE DETECTED | |
| | 5050 | | | 7.7 | | | |
| F3 1599.01 KLAMATH RIVER BELOW IRON GATE DAM | | | | | | | |
| 03/13/73 1330 | 5050 | 7.0C | 10.2 | | NONE DETECTED | NONE DETECTED | |
| | 5050 | | | 7.4 | | | |

TABLE D-5 NUTRIENT ANALYSIS OF SURFACE WATER

Lab and Sampler Agency Codes

- 5000 - U. S. Geological Survey
- 5050 - Department of Water Resources

Abbreviations

- TIME - Pacific Standard Time on a 24-hour clock.
- G.H. - Instantaneous gage height in feet above an established datum.
- Q - Instantaneous discharge measured in cubic feet per second (cfs). "E" indicates the value has been estimated.
- TEMP - Water temperature in degrees Fahrenheit (F) or Celsius (C).
- TURB - Jackson Turbidity Units measured with a Hellege Turbidimeter (E) or a Hach Nephelometer (A).
- PH - Measure of acidity or alkalinity of water.
- EC - Electrical conductance in micromhos at 25° C.
- HCO₃ - Bicarbonate
- CO₃ - Carbonate

Nitrogen Series as N

- NO₂ - Unfiltered nitrite
- NH₃ - Unfiltered ammonia
- NO₃ - Unfiltered nitrate
- ORG N - Organic nitrogen
- DIS ORG N - Dissolved organic nitrogen
- NH₃ + ORG N - Ammonia plus organic nitrogen

Phosphorus Series as P

- DIS A.H.PO₄ - Dissolved acid hydrolyzable phosphate
- D O-PO₄ - Dissolved orthophosphate
- T O-PO₄ - Total orthophosphate
- D TOT P - Dissolved total phosphorus
- TOT P - Total phosphorus

TABLE D-5

| DATE | TIME | SAMP | G.H. | LAB | DISCH. | TEMP | DEPTH | PH | EC | FIELD | | | FIELD LAB | | | NUTRIENT ANALYSIS OF SURFACE WATER | | | | | | | | | | | | NUTRIENT CONSTITUENTS IN MILLIGRAMS PER LITER | | | | | |
|---|------|------|------|-----|--------|------|-------|-------|-------|-------|-------------------|---|------------------|-------------------|-------------------|------------------------------------|-----|-----------------|-----------------|------|-------|-----|-------|-----|------|--------------------------------|------|---|------|------|--|--|--|
| | | | | | | | | | | TURB | CACO ₃ | P | HCO ₃ | F-CO ₂ | CACO ₃ | T | C03 | NH ₃ | N0 ₂ | F | ORG N | F | (NM3) | O15 | F | H ₃ P0 ₄ | F | TOT P | | | | | |
| F2 1050.00 SHASTA RIVER NEAR YREKA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 03/13/73 | 1405 | 5050 | | | 5050 | | | 8.0C | 8.2 | | | | | | | | | -- | -- | -- | -- | -- | -- | -- | 0.16 | -- | | | | | | | |
| 09/07/73 | 1115 | 5050 | | | 5050 | | | 2.66 | 18.0C | 8.3 | 675 | | | | | | | -- | -- | -- | -- | -- | -- | -- | 0.17 | -- | | | | | | | |
| F2 5250.00 SCOTT RIVER NEAR FORT JONES | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 03/13/73 | 1645 | 5050 | | | 5050 | | | 7.0C | 7.5 | | | | | | | | | -- | 0.30 | -- | -- | 0.1 | -- | -- | 0.01 | -- | | | | | | | |
| F3 1100.00 KLAMATH RIVER NEAR KLAMATH | | | | | | | | | | | | | | | | | | | -- | -- | -- | -- | -- | -- | -- | 0.24 | -- | | | | | | |
| 02/05/73 | 1430 | 5050 | | | 5000 | | | 7.5C | 7.4 | 141 | | | | | | | | -- | 0.22 | -- | -- | -- | -- | -- | -- | -- | -- | | | | | | |
| 03/05/73 | 1515 | 5050 | | | 5050 | | | 8.0C | 7.5 | 152 | | | | | | | | -- | 0.12 | -- | -- | -- | -- | -- | -- | -- | 0.12 | -- | | | | | |
| 04/02/73 | 1430 | 5050 | | | 5050 | | | 9.0C | 7.6 | 141 | | | | | | | | -- | 0.03 | -- | -- | -- | -- | -- | -- | -- | -- | 0.08 | -- | | | | |
| 05/22/73 | 1435 | 5050 | | | 5000 | | | 17.0C | 7.5 | 119 | | | | | | | | -- | 0.00 | -- | -- | -- | -- | -- | -- | -- | -- | 0.03 | -- | | | | |
| 06/20/73 | 0830 | 5050 | | | 5050 | | | 18.0C | 7.8 | 171 | | | | | | | | -- | 0.00 | -- | -- | -- | -- | -- | -- | -- | 0.02 | -- | | | | | |
| 07/09/73 | 1420 | 5050 | | | 5000 | | 3020 | 21.0C | 8.1 | 193 | 3A | | | | | | | -- | 0.00 | -- | -- | -- | -- | -- | -- | -- | 0.04 | -- | | | | | |
| 08/07/73 | 0945 | 5050 | | | 5050 | | 2750 | 20.0C | 7.7 | 206 | 1A | | | | | | | -- | 0.00 | -- | -- | -- | -- | -- | -- | -- | 0.06 | -- | | | | | |
| 09/12/73 | 0835 | 5050 | | | 5000 | | 4.26 | 18.0C | 7.8 | 206 | | | | | | | | -- | 0.01 | -- | -- | -- | -- | -- | -- | -- | 0.09 | -- | | | | | |
| F3 1430.00 KLAMATH RIVER NEAR SEIAD VALLEY | | | | | | | | | | | | | | | | | | | -- | 0.77 | -- | -- | 0.5 | -- | -- | 0.10 | -- | | | 0.12 | | | |
| 03/13/73 | 1545 | 5050 | | | 5050 | | | 7.0C | 7.9 | | | | | | | | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.12 | -- | | | | |
| 09/07/73 | 0910 | 5050 | | | 5050 | | 850 F | 18.0C | 8.4 | 208 | | | | | | | | -- | 0.05 | -- | -- | -- | -- | -- | -- | 0.13 | -- | | | | | | |
| F3 1470.00 KLAMATH RIVER ABOVE HAMBURG RESERVOIR SITE | | | | | | | | | | | | | | | | | | | -- | 0.86 | -- | -- | -- | -- | -- | 0.12 | -- | | | | | | |
| 01/24/73 | 1000 | 5050 | | | 5050 | | | 2.5C | 7.6 | 215 | | | | | | | | -- | 0.86 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | | |
| 03/13/73 | 1450 | 5050 | | | 5050 | | | 7.0C | 7.7 | | | | | | | | | -- | 0.86 | -- | -- | 0.6 | -- | -- | -- | 0.12 | -- | | 0.15 | | | | |
| F3 1599.01 KLAMATH RIVER BELOW IRON GATE DAM | | | | | | | | | | | | | | | | | | | -- | 1.1 | -- | -- | 0.8 | -- | -- | 0.14 | -- | | | 0.17 | | | |
| 03/13/73 | 1330 | 5050 | | | 5050 | | | 7.0C | 7.4 | | | | | | | | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | | |
| 06/14/73 | 0755 | 5050 | | | 5050 | | | 18.0C | 8.0 | 214 | 1A | | | | | | | -- | 0.12 | -- | -- | -- | -- | -- | -- | 0.12 | -- | | | | | | |
| 09/07/73 | 0700 | 5050 | | | 5050 | | | 17.0C | 8.1 | 180 | | | | | | | | -- | 0.18 | -- | -- | -- | -- | -- | -- | 0.16 | -- | | | | | | |
| F4 1080.00 TRINITY RIVER AT HOOPA | | | | | | | | | | | | | | | | | | | -- | 0.07 | -- | -- | -- | -- | -- | 0.01 | -- | | | | | | |
| 01/16/73 | 1030 | 5050 | | | 5050 | | | 7.0C | 7.5 | 125 | | | | | | | | -- | 0.07 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | | |
| 05/22/73 | 0950 | 5050 | | | 5050 | | 3100 | 15.0C | 8.3 | 126 | 4A | | | | | | | -- | 0.02 | -- | -- | -- | -- | -- | -- | 0.00 | -- | | | | | | |
| 09/11/73 | 1005 | 5050 | | | 5050 | | 13.19 | 19.0C | 8.0 | 192 | | | | | | | | -- | 0.03 | -- | -- | -- | -- | -- | -- | 0.00 | -- | | | | | | |
| F4 1376.00 TRINITY RIVER NEAR BURNT RANCH | | | | | | | | | | | | | | | | | | | -- | 0.07 | -- | -- | -- | -- | -- | 0.01 | -- | | | | | | |
| 01/16/73 | 0930 | 5050 | | | 5050 | | | 6.5C | 7.3 | 111 | | | | | | | | -- | 0.07 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | | |
| 09/11/73 | 0910 | 5050 | | | 5050 | | 283 | 19.0C | 7.8 | 144 | | | | | | | | -- | 0.02 | -- | -- | -- | -- | -- | -- | 0.00 | -- | | | | | | |
| F4 1640.00 TRINITY RIVER AT LEWISTON | | | | | | | | | | | | | | | | | | | -- | 0.06 | -- | -- | -- | -- | -- | 0.01 | -- | | | | | | |
| 05/22/73 | 0715 | 5050 | | | 5050 | | 150 E | 8.5C | 7.1 | 84 | 0A | | | | | | | -- | 0.06 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | | |
| 09/19/73 | 1005 | 5050 | | | 5050 | | | 9.0C | 7.1 | 90 | | | | | | | | -- | 0.01 | -- | -- | 0.1 | -- | -- | -- | 0.00 | -- | | | 0.02 | | | |
| 09/21/73 | 1400 | 5050 | | | 5050 | | | 3.24 | 10.0C | 7.3 | 90 | | | | | | | -- | 0.00 | -- | -- | 0.1 | -- | -- | -- | 0.01 | -- | | | 0.02 | | | |
| F6 1100.00 EEL RIVER AT SCOTIA | | | | | | | | | | | | | | | | | | | -- | 0.05 | -- | -- | -- | -- | -- | -- | -- | -- | 0.44 | | | | |
| 02/06/73 | 1545 | 5050 | | | 5000 | | | 9.0C | 7.5 | 115 | | | | | | | | -- | 0.04 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 03/06/73 | 1215 | 5050 | | | 5050 | | | 10.0C | 7.4 | 152 | | | | | | | | -- | 0.04 | -- | -- | -- | -- | | | | | | | | | | |

TABLE D-5 (Cont.)

NUTRIENT ANALYSIS OF SURFACE WATER



GROUND WATER BASINS, WATER QUALITY SAMPLES

APPENDIX E

GROUND WATER QUALITY

This appendix presents ground water quality data collected during the period from October 1, 1972, through September 30, 1973. The data were collected from a number of major ground water sources in the North Coastal area in cooperation with local agencies. During the 1973 water year, 99 wells were sampled in 12 ground water basins.

At the time of field sampling, pH, specific conductance, and temperature measurements are made. The results are compared with measurements made in previous years. If a substantial change is noted, the samples are submitted to the laboratory for further analyses.

Laboratory analyses of ground waters are performed in accordance with "Standard Methods for the Examination of Water and Waste Water", 13th Edition, 1971.

The Region and Basin and State Well Numbering Systems are described in Appendix C, "Ground Water Measurements".

TABLE E-1 MINERAL ANALYSES OF GROUND WATER

An explanation of column headings follows:

The LAB and SAMPLER agency code is as follows:

5050 - California Department of Water Resources

TIME

- Pacific Standard Time on a 24-hour clock.

TEMP

- Water temperature in degrees Fahrenheit or degrees Celsius. The computer prints out both.

PH LAB & FIELD

- Measure of acidity or alkalinity of water.

EC LAB

- The electrical conductance in micromhos at 25° Celsius.

EC FIELD

- The electrical conductance in micromhos at time of field sampling.

TDS

- Gravimetric determination of total dissolved solids at 180° Celsius.

SUM

- Total dissolved solids determined by addition of analyzed constituents.

TH

- Total hardness.

NCH

- Noncarbonate hardness.

SAR

- Sodium adsorption ratio.

PERCENT REACTANCE

VALUE

- Determined by dividing the sum of the cations or anions in milliequivalents per liter into each constituent in milliequivalents per liter arriving at a percentage. For a partial analysis, an approximate value is determined by multiplying the electrical conductance by 0.01 and using that as the cation or anion sum.

The MINERAL CONSTITUENTS are as follows:

| | | | |
|------------------|---------------|------------------|-------------|
| B | - Boron | K | - Potassium |
| CA | - Calcium | MG | - Magnesium |
| CL | - Chloride | NA | - Sodium |
| CO ₃ | - Carbonate | NO ₃ | - Nitrate |
| F | - Fluoride | SiO ₂ | - Silica |
| HCO ₃ | - Bicarbonate | SO ₄ | - Sulfate |

TABLE E-1
MINERAL ANALYSES OF GROUND WATER

| DATE TIME | SAMPLER LAB | TEMP PH | FIELD LABORATORY EC | MINERAL CONSTITUENTS IN | | | | | | | | MILLIGRAMS PER LITER | | | | MILLIGRAMS PER LITER | | | | | |
|-----------------------------|----------------|---------------|---------------------------|-------------------------|------|------|------------|-----------------|------------------|-----------------|------------|----------------------|-------------|-------------|-------------|----------------------|------------------|------------|----------|-----|--|
| | | | | CA | MG | NA | K | CO ₃ | HCO ₃ | SO ₄ | CL | NOS | B | F | TDS | TH | SIO ₂ | SUM | NCH | SAR | |
| 1 | | | | | | | | | | | | | | | | | | | | | |
| 1-01 | | | | | | | | | | | | | | | | | | | | | |
| NORTH COASTAL REGION | | | | | | | | | | | | | | | | | | | | | |
| SMITH RIVER PLAIN | | | | | | | | | | | | | | | | | | | | | |
| 09/23/73 1135 | 5050 | 16N/01W-02001 | H 58.0F 14.4C | 6.7 | 175 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| 09/24/73 1510 | 5050 5050 | 16N/01W-20H01 | H 59.0F 15.0C | 6.2 | 190 | -- | -- | -- | -- | -- | -- | -- | 16 .45 | 16.0 .26 | -- | -- | 59 | | | | |
| 09/24/73 1530 | 5050 5050 | 16N/02W-13E01 | H 65.0F 18.3C | 6.5 8.0 | 560 | 563 | 50 2.50 | 18 1.48 | 38 26 | .8 .02 | 0 .00 | 221 3.62 | 22 .46 | 55 1.55 | .7 .01 | .00 | -- | 302 293 | 50 18 | 1.2 | |
| 09/24/73 1220 | 5050 | 17N/01W-03E01 | H 62.0F 16.7C | 7.1 | 345 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| 09/24/73 1200 | 5050 | 17N/01W-14C02 | H 6.7 | 200 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| 09/24/73 1425 | 5050 | 18N/01W-05K01 | H 59.0F 15.0C | 6.1 | 175 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| 09/24/73 1400 | 5050 | 18N/01W-17R04 | H 63.0F 17.2C | 6.8 | 300 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| 09/24/73 1440 | 5050 | 18N/01W-26H01 | H 62.0F 16.7C | 6.3 | 125 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| 09/24/73 1255 | 5050 5050 | 18N/01W-34M02 | H 58.0F 14.4C | 6.8 8.1 | 320 | 315 | 11 .55 | 33 2.71 | 3.0 .13 | .6 .02 | 0 .00 | 188 3.08 | 6.2 .13 | 4.8 .14 | 12.0 .19 | .00 | -- | 169 163 | 165 9 | 0.1 | |
| 1-02 | | | | | | | | | | | | | | | | | | | | | |
| KLAMATH RIVER BASIN | | | | | | | | | | | | | | | | | | | | | |
| 08/15/73 1230 | 5050 | 46N/02F-15F01 | H 58.0F 14.4C | 7.1 | 170 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| 08/15/73 1300 | 5050 5050 | 47N/02E-20C01 | H 57.0F 13.9C | 6.9 | 1350 | -- | -- | -- | -- | -- | -- | -- | 168 4.74 | 38.0 .61 | -- | -- | 449 | | | | |
| 1-03 | | | | | | | | | | | | | | | | | | | | | |
| BUTTE VALLEY | | | | | | | | | | | | | | | | | | | | | |
| 08/15/73 1115 | 5050 | 45N/01E-09C02 | H 57.0F 13.9C | 7.7 | 195 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| 08/15/73 1400 | 5050 5050 | 47N/01F-06A02 | H 52.0F 11.1C | 8.0 8.7 | 1160 | 1030 | 16 .80 | 32 2.63 | 170 7.40 | 20 .51 | 40 1.33 | 521 8.54 | 35 .73 | 31 .87 | 6.0 .10 | .90 | -- | 649 607 | 174 0 | 5.6 | |
| 08/16/73 0815 | 5050 | 47N/01E-06J01 | H 55.0F 12.8C | 8.0 | 1250 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| 08/16/73 0955 | 5050 5050 | 47N/01E-07C02 | H 60.0F 15.5C | 8.1 8.6 | 690 | 727 | 20 1.00 | 22 1.81 | 106 4.61 | 12 .31 | 13 .43 | 342 5.61 | 31 .65 | 37 1.04 | 1.7 .03 | .10 | -- | 440 411 | 141 0 | 3.9 | |
| 08/16/73 0945 | 5050 | 47N/01E-07C03 | H 75.0F 23.9C | 8.1 | 460 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| 08/16/73 0835 | 5050 5050 | 47N/01E-08001 | H 57.0F 13.9C | 7.7 8.6 | 775 | 830 | 22 1.10 | 16 1.32 | 145 6.31 | 12 .31 | 27 .90 | 427 7.00 | 22 .46 | 24 .68 | 1.4 .02 | .50 | -- | 537 480 | 120 0 | 5.7 | |
| 08/16/73 0950 | 5050 | 47N/01E-72A01 | H 68.0F 20.0C | 8.1 | 220 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| 08/15/73 1055 | 5050 | 45N/01W-33D01 | H 65.0F 18.3C | 7.0 | 110 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |

TABLE E-1 (Cont.)
MINERAL ANALYSES OF GROUND WATER

| DATE TIME | SAMPLER LAB | TEMP PH | FIELD LABORATORY EC | MINERAL CONSTITUENTS IN | | | | | | MILLIGRAMS PER LITER | | | | | | MILLIGRAMS PER LITER | | | | | | |
|--------------------------------------|----------------|---------------|---------------------------|-------------------------|------------|------------------|------------------|------------------|------------------|----------------------|-------------------|-----------------|-----------------|------------------|-----|----------------------|------------------|-----|-----|-----|--|--|
| | | | | CA | MG | NA | K | COR | HCO ₃ | SO ₄ | CL | NOS | B | F | TDS | TH | SiO ₂ | SUM | NCH | SAR | | |
| 1 1-03 | | | | | | | | | | | | | | | | | | | | | | |
| NORTH COASTAL REGION BUTTE VALLEY | | | | | | | | | | | | | | | | | | | | | | |
| 08/06/73 1635 | 5050 | 45N/02W-01P01 | M 50.0F 10.0C | 6.8 | 220 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 08/16/73 1030 | 5050 | 46N/01W-02F01 | M 53.0F 11.7C | 8.2 | 410 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 08/16/73 1415 | 5050 | 46N/01W-09R01 | M 57.0F 13.9C | 8.4 | 405 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 08/15/73 1340 | 5050 5050 | 46N/01W-17B01 | M 53.0F 11.7C | 8.2 8.6 | 385 378 | 20 1.00 24 | 18 1.48 36 | 36 1.57 38 | 4.2 .11 3 | 9.0 .30 7 | 215 3.52 86 | .1 .13 3 | 3.8 .11 3 | 1.1 .02 3 | .00 | -- | 220 | 123 | 0 | 1.4 | | |
| 08/16/73 1320 | 5050 | 46N/01W-17G02 | M 62.0F 16.7C | 8.1 | 380 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 08/15/73 1210 | 5050 | 46N/01W-17L01 | M 53.0F 11.7C | 7.6 | 485 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 08/16/73 1640 | 5050 5050 | 46N/01W-29F01 | M 52.0F 11.1C | 7.1 8.1 | 270 260 | 13 .65 23 | 19 1.56 56 | 11 .48 17 | 3.3 .08 3 | 0 .00 85 | 141 2.31 85 | .1 .23 8 | 2.8 .08 3 | 6.6 .11 4 | .00 | -- | 180 | 111 | 0 | 0.5 | | |
| 08/16/73 1620 | 5050 5050 | 46N/01W-30001 | M 52.0F 11.1C | 7.1 8.2 | 320 306 | -- | -- | 11 .48 15 | -- | 0 .00 | 146 2.39 | -- | 2.4 .07 | -- | -- | -- | -- | -- | 133 | 0.4 | | |
| 08/15/73 1745 | 5050 | 46N/02W-13P01 | M 58.0F 14.4C | 7.1 | 460 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 08/16/73 1250 | 5050 | 46N/02W-16A02 | M 50.0F 10.0C | 8.0 | 185 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 08/16/73 1500 | 5050 5050 | 46N/02W-25R01 | M 52.0F 11.1C | 7.1 8.1 | 400 385 | 23 1.15 28 | 26 2.14 53 | 14 .61 15 | 5.4 .14 3 | 0 .00 3 | 170 2.79 71 | .1 .90 23 | 3.1 .09 2 | 9.7 .16 4 | .00 | -- | 253 | 165 | 25 | 0.5 | | |
| 08/16/73 1455 | 5050 | 46N/02W-25R03 | M 52.0F 11.1C | 7.1 | 325 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 08/16/73 1530 | 5050 5050 | 46N/02W-26P01 | M 53.0F 11.7C | 7.8 7.9 | 200 189 | 15 .75 37 | 9.7 .80 39 | 9.7 .42 21 | 2.3 .06 3 | 0 .00 96 | 116 1.90 96 | .1 .01 1 | 1.2 .03 2 | 1.8 .03 2 | .00 | -- | 128 | 77 | 0 | 0.5 | | |
| 08/16/73 1515 | 5050 5050 | 46N/02W-26002 | M 52.0F 11.1C | 7.1 8.0 | 320 283 | 15 .75 25 | 20 1.64 54 | 12 .52 17 | 4.5 .12 4 | 0 .00 86 | 157 2.57 86 | .1 .21 7 | 4.8 .14 5 | 4.6 .07 2 | .00 | -- | 190 | 119 | 0 | 0.5 | | |
| 08/16/73 1545 | 5050 | 46N/02W-34801 | M 53.0F 11.7C | 8.1 | 155 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 08/16/73 1605 | 5050 | 46N/02W-36K01 | M 55.0F 12.8C | 7.1 | 350 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 08/16/73 1100 | 5050 5050 | 47N/01W-23H02 | M 73.0F 22.8C | 7.4 8.4 | 470 462 | 11 .55 12 | 18 1.48 32 | 55 2.39 52 | 8.5 .22 5 | 0 .00 72 | 199 3.26 72 | .0 .00 19 | 30 .85 19 | 25.0 .40 9 | .10 | -- | 290 | 102 | 0 | 2.4 | | |
| 08/16/73 0720 | 5050 | 47N/02W-21H03 | M 62.0F 16.7C | 7.2 | 115 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 08/15/73 1545 | 5050 | 48N/01W-28F01 | M 82.0F 27.8C | 9.1 | 200 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 08/15/73 1515 | 5050 5050 | 48N/01W-28J03 | M 58.0F 14.4C | 7.6 8.2 | 520 466 | -- | -- | -- | -- | 0 .00 | 251 4.11 | -- | 5.7 .16 | -- | -- | -- | -- | -- | 168 | | | |

TABLE E-1 (Cont.)
MINERAL ANALYSES OF GROUND WATER

| DATE TIME | SAMPLER LAB | TEMP FIELD LABORATORY PH EC | MINERAL CONSTITUENTS IN | | | | | | | | MILLIGRAMS PER LITER | | | | MILLIGRAMS PER LITER | | | | | |
|----------------------|----------------|---|-------------------------|--------------------|-------------------|-----------------|--------------------------|-------------------|-----------------|-------------------|----------------------|------|----|-----|----------------------|-----|------|--|--|--|
| | | | CA | MG | NA | K | CO ₃ | HCO ₃ | SO ₄ | CL | NO ₃ | A | F | TDS | TH | SAR | | | | |
| 1 | | | | | | | | | | | | | | | | | | | | |
| 1-03 | | | | | | | | | | | | | | | | | | | | |
| NORTH COASTAL REGION | | | | | | | | | | | | | | | | | | | | |
| BUTTE VALLEY | | | | | | | | | | | | | | | | | | | | |
| 08/15/73 1610 | 5050 5050 | 48N/01W-31H01 M 62.0F 7.1 380 16.7C 7.8 381 | -- | -- | -- | -- | 0 | 97 | -- | 17 | 75.0 | -- | -- | -- | -- | -- | 151 | | | |
| 08/15/73 1630 | 5050 | 48N/01W-34B01 M 66.0F 8.0 465 18.9C | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 08/15/73 1645 | 5050 5050 | 48N/01W-34G01 M 80.0F 8.3 480 26.6C 8.5 503 | -- | -- | -- | -- | 9.0 .30 | 272 4.46 | -- | 12 | -- | -- | -- | -- | -- | 67 | | | | |
| 1-04 | | | | | | | | | | | | | | | | | | | | |
| SHASTA VALLEY | | | | | | | | | | | | | | | | | | | | |
| 07/23/73 1400 | 5050 5050 | 42N/05W-20F01 M 66.0F 7.1 625 18.9C 8.7 615 | 21 1.05 15 | 48 3.95 58 | 41 1.78 26 | 1.6 .04 1 | 25 .83 12 | 294 4.82 72 | 10 .21 3 | 27 .76 11 | 2.2 .04 1 | 1.60 | -- | 369 | 250 | 0 | 1.1 | | | |
| 07/23/73 1335 | 5050 | 42N/05W-20J01 M 61.0F 6.9 365 16.1C | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 07/23/73 1400 | 5050 5050 | 42N/06W-10J01 M 63.0F 7.4 565 17.2C 8.5 548 | -- | -- | 3.6 .16 2 | -- | 15 .50 5.93 | 362 | -- | 5.1 .14 | -- | -- | -- | -- | 326 | 0.1 | -- | | | |
| 07/27/73 0715 | 5050 5050 | 43N/04W-07H01 M 70.0F 6.8 1950 21.1C 8.5 1720 | 14 .70 4 | 145 11.92 62 | 148 6.44 34 | 5.5 .14 1 | 82 2.73 15 | 606 9.93 53 | .6 .07 32 | 213 6.01 32 | 1.6 .03 | 4.50 | -- | 990 | 631 | 0 | 2.6 | | | |
| 07/24/73 1020 | 5050 | 43N/05W-02C01 M 53.0F 6.8 245 11.7C | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 07/27/73 0901 | 5050 5050 | 43N/06W-15L01 M 56.0F 7.3 600 13.3C 8.1 408 | 32 1.60 36 | 27 2.22 50 | 14 .61 14 | 1.4 .04 1 | 0 .00 91 | 247 4.05 91 | 9.9 .21 5 | 3.3 .09 2 | 5.5 .09 2 | .00 | -- | 218 | 193 | 0 | 0.4 | | | |
| 07/23/73 1440 | 5050 | 43N/06W-21R01 M 60.0F 7.3 490 15.5C | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 07/24/73 0945 | 5050 | 44N/05W-32C03 M 63.0F 7.2 1010 17.2C | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 07/24/73 1000 | 5050 5050 | 44N/05W-34H01 M 58.0F 7.0 760 14.4C 8.2 774 | 51 2.54 30 | 42 3.45 41 | 53 2.31 27 | 6.2 .16 2 | 0 .00 79 | 396 6.49 79 | 26 .54 7 | 29 82 10 | 24.0 .39 5 | .50 | -- | 498 | 299 | 0 | 1.3 | | | |
| 07/25/73 0926 | 5050 5050 | 44N/06W-15C01 M 66.0F 7.3 590 18.9C 8.2 427 | 31 1.55 35 | 22 1.81 41 | 23 1.00 23 | .9 .02 0 | 0 .00 3.23 74 | 197 3.23 74 | .7 .18 4 | 27 76 17 | 12.0 .19 4 | .30 | -- | 253 | 167 | 7 | 0.8 | | | |
| 07/24/73 0905 | 5050 5050 | 44N/06W-22K01 M 64.0F 7.2 425 17.8C 8.4 437 | 49 2.45 52 | 18 1.48 32 | 16 .70 15 | 1.5 .04 2 | 2.0 .07 3.69 81 | 225 3.69 81 | 10 .21 5 | 13 37 8 | 14.0 .23 5 | .10 | -- | 258 | 195 | 9 | 0.5 | | | |
| 07/24/73 1340 | 5050 5050 | 45N/05W-06E01 M 71.0F 8.0 910 21.6C 8.6 922 | 8.9 .44 4 | 8.3 .68 7 | 203 8.83 88 | 1.5 .04 6 | 18 .60 6 | 527 8.64 86 | .6 .01 8 | 27 76 8 | .0 .00 8 | 7.30 | -- | 578 | 56 | 0 | 11.8 | | | |
| 07/23/73 1205 | 5050 | 45N/06W-19E01 M 82.0F 7.7 340 27.8C | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 07/24/73 1430 | 5050 5050 | 45N/06W-22R01 M 61.0F 8.2 505 16.1C 8.5 500 | 5.8 .29 6 | 2.8 .23 4 | 108 4.70 90 | .6 .02 4 | 7.0 .23 4 | 282 4.62 88 | 3.6 .07 1 | 11 31 6 | .8 .01 | .60 | -- | 324 | 26 | 0 | 9.2 | | | |
| 07/24/73 1600 | 5050 5050 | 45N/06W-27D02 M 59.0F 8.0 540 15.0C 8.4 522 | 35 1.75 32 | 27 2.22 40 | 34 1.48 27 | 1.9 .05 1 | 7.0 .23 4 | 230 3.77 70 | 31 .65 12 | 18 51 9 | 16.0 .26 5 | .00 | -- | 326 | 198 | 0 | 1.1 | | | |
| 07/25/73 0720 | 5050 5050 | 45N/06W-30E01 M 66.0F 7.4 420 18.9C 8.0 440 | 38 1.90 42 | 19 1.56 35 | 23 1.00 22 | .7 .02 0 | 0 .00 3.20 71 | 195 3.20 71 | 41 .85 19 | 8.1 .23 5 | 15.0 .24 5 | .10 | -- | 260 | 174 | 13 | 0.8 | | | |
| 1-05 | | | | | | | | | | | | | | | | | | | | |
| SCOTT RIVER VALLEY | | | | | | | | | | | | | | | | | | | | |
| 07/26/73 1400 | 5050 5050 | 42N/09W-02B01 M 56.0F 7.2 560 13.3C 8.5 527 | 71 3.54 60 | 25 2.06 35 | 6.2 .27 5 | .7 .02 6 | 10 .33 6 | 276 4.52 79 | 13 .27 5 | 8.3 -.23 4 | 21.0 .34 6 | .00 | -- | 266 | 281 | 38 | 0.2 | | | |

TABLE E-1 (Cont)
MINERAL ANALYSES OF GROUND WATER

| DATE TIME | SAMPLER LAB | TEMP PH | FIELD LABORATORY EC | MINERAL CONSTITUENTS IN PERCENT REACTANCE VALUE | | | | | | | | | | | | MILLIGRAMS PER LITER | | | | | | |
|--|----------------|--------------------|---------------------------|--|------------|------------------|------------------|-------------------|------------------|-----------------|-------------------|-----------------|-----------------|-----------------|-------------|----------------------|------------------|-----------|-----|-----|--|--|
| | | | | CA | MG | NA | K | CO ₃ | HCO ₃ | SO ₄ | CL | NO ₃ | B | F | TDS | TH | SIO ₂ | SUM | NCH | SAR | | |
| 1-05 | | | | | | | | | | | | | | | | | | | | | | |
| NORTH COASTAL REGION SCOTT RIVER VALLEY | | | | | | | | | | | | | | | | | | | | | | |
| 07/26/73 1220 | 5050 5050 | 42N/09W-27K01 M | 64.0F 17.8C | 6.5 7.1 | 60 54 | 6.0 .30 60 | 1.3 .11 22 | 1.9 .08 16 | .5 .01 2 | 0 0.00 | 29 .48 83 | 2.1 .04 7 | 1.7 .05 9 | .4 .01 2 | .00 0.00 | -- -- | 40 28 | 21 0 | 0.2 | | | |
| 07/26/73 1145 | 5050 5050 | 42N/09W-29A02 M | 65.0F 18.3C | 7.0 8.2 | 155 149 | 13 .65 41 | 8.4 .69 43 | 5.8 .25 16 | .3 .01 1 | 0 0.00 | 94 1.54 96 | 1.3 .03 2 | 1.4 .04 2 | .2 .00 | .00 0.00 | -- -- | 120 77 | 67 0 | 0.3 | | | |
| 07/26/73 0820 | 5050 | 43N/09W-02G01 M | 68.0F 20.0C | 7.1 | 500 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | | |
| 07/26/73 0920 | 5050 5050 | 43N/09W-08F01 M | 66.0F 18.9C | 6.9 7.7 | 120 116 | 15 .75 65 | 3.6 .30 26 | 2.2 .10 9 | .5 .01 1 | 0 0.00 | 64 1.05 87 | 3.1 .06 5 | 2.2 .06 5 | 2.3 .04 3 | .00 0.00 | -- -- | 81 60 | 52 0 | 0.1 | | | |
| 07/26/73 0955 | 5050 5050 | 43N/09W-08H01 M | 59.0F 15.0C | 6.5 8.2 | 175 166 | 14 .70 41 | 8.5 .70 41 | 6.2 .27 16 | .9 .02 1 | 0 0.00 | 80 1.31 75 | 17 .35 20 | 2.4 .07 4 | .4 .01 1 | .00 0.00 | -- -- | 107 89 | 70 5 | 0.3 | | | |
| 07/26/73 1425 | 5050 | 43N/09W-24F02 M | 56.0F 13.3C | 7.0 | 455 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | | |
| 07/26/73 0850 | 5050 | 43N/09W-29G02 M | 68.0F 20.0C | 6.1 | 65 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | | |
| 07/26/73 1015 | 5050 5050 | 43N/10W-11E01 M | 62.0F 16.7C | 7.1 7.3 | 89 86 | -- | -- | 1.0 .04 5 | -- | 0 .00 | 53 .87 | -- | 1.8 .05 | -- | -- | -- | -- | 42 0.1 | | | | |
| 07/26/73 0835 | 5050 | 44N/09W-34R01 M | 68.0F 20.0C | 6.8 | 305 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | | |
| 1-06 | | | | | | | | | | | | | | | | | | | | | | |
| HAYFORK VALLEY | | | | | | | | | | | | | | | | | | | | | | |
| 07/05/73 1225 | 5050 | 31N/12W-12L01 M | 67.0F 19.4C | 6.1 | 191 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | | |
| 07/05/73 1105 | 5050 5050 | 31N/12W-15K01 M | 67.0F 19.4C | 7.1 | 241 | 20 | 14 | 5.8 | .7 | 0 | 136 | 10 | 3.8 | .8 | .00 | -- | 155 122 | 109 0 | 0.2 | | | |
| 1-08 | | | | | | | | | | | | | | | | | | | | | | |
| MAD RIVER VALLEY | | | | | | | | | | | | | | | | | | | | | | |
| 09/25/73 1530 | 5050 | 05N/01E-04H04 H | 63.0F 17.2C | 7.8 | 475 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | | |
| 09/25/73 1600 | 5050 | 06N/01E-07M01 H | 60.0F 15.5C | 6.8 | 480 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | | |
| 09/25/73 1715 | 5050 | 06N/01E-08H01 H | 58.0F 14.4C | 6.1 | 180 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | | |
| 09/25/73 1645 | 5050 | 06N/01E-19Q01 H | 58.0F 14.4C | 6.7 | 380 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | | |
| 09/25/73 1615 | 5050 | 06N/01E-30N01 H | 57.0F 13.9C | 7.3 | 395 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | | |
| 09/25/73 1550 | 5050 5050 | 06N/01E-32F01 H | 72.0F 22.2C | 7.6 8.2 | 685 | 13 .65 9 | 11 .90 13 | 124 5.39 76 | 6.7 .17 2 | 0 0.00 | 298 4.88 67 | .0 .00 32 | 82 2.31 1 | 4.2 .07 1 | .40 0.40 | -- -- | 397 388 | 77 0 | 6.1 | | | |
| 09/24/73 1720 | 5050 5050 | 06N/01W-01M01 H | 62.0F 16.7C | 6.4 6.6 | 200 | -- | -- | -- | -- | 0 | 34 | -- | 22 | -- | -- | -- | -- | 49 | | | | |
| 1-09 | | | | | | | | | | | | | | | | | | | | | | |
| EUREKA PLAIN | | | | | | | | | | | | | | | | | | | | | | |
| 09/25/73 1435 | 5050 | 05N/01E-18Q01 H | 62.0F 16.7C | 7.5 | 850 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | | |

TABLE E-1 (Cont.)
MINERAL ANALYSES OF GROUND WATER

| DATE TIME | SAMPLER LAB | TEMP FIELD PH EC | FIELD LABORATORY | MINERAL CONSTITUENTS IN | | | | | | | | MILLIGRAMS PER LITER | | | | MILLIGRAMS PER LITER | | | | | |
|---|----------------|---------------------------|---------------------|-------------------------|-----|------|------|-----------------|------------------|-----------------|-----|----------------------|-----|-----|------------|----------------------|-----|-----|--|--|--|
| | | | | CA | MG | NA | K | CO ₃ | HCO ₃ | SO ₄ | CL | N _O 3 | B | F | TDS SUM | TH NCH | SAR | | | | |
| 1 1-09 NORTH COASTAL REGION EUREKA PLAIN | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| 09/25/73 1500 | 5050 | 05N/01E-20001 | H | 57.0F 13.9C | 6.5 | 265 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 09/25/73 1310 | 5050 5050 | 04N/01W-08P01 | H | 57.0F 13.9C | 7.6 | 175 | -- | -- | -- | 0 | .67 | -- | 15 | -- | -- | -- | -- | 54 | | | |
| 09/25/73 1200 | 5050 | 04N/01W-16M01 | H | 58.0F 14.4C | 7.6 | 485 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 09/25/73 1325 | 5050 5050 | 04N/01W-17801 | H | 55.0F 12.8C | 7.2 | 180 | -- | -- | -- | 0 | .66 | -- | 14 | -- | -- | -- | -- | 55 | | | |
| 09/25/73 1405 | 5050 5050 | 05N/01W-29001 | H | 60.0F 15.5C | 6.4 | 315 | 9.4 | 15 | 22 | 2.7 | 0 | 81 | 16 | 24 | 9.1 | .00 | -- | 179 | | | |
| | | | | | | | .47 | 1.23 | .96 | .07 | .00 | 1.33 | .33 | .68 | .15 | -- | 138 | 87 | | | |
| | | | | | | | 17 | 45 | 35 | 3 | 53 | 13 | 27 | 6 | | | 19 | 1.0 | | | |
| 1-10 EEL RIVER VALLEY | | | | | | | | | | | | | | | | | | | | | |
| 09/25/73 0850 | 5050 5050 | 02N/01W-07F01 | H | 54.0F 12.2C | 7.1 | 430 | 32 | 27 | 16 | 1.6 | 0 | 179 | 53 | 20 | .6 | .00 | -- | 246 | | | |
| 09/25/73 1120 | 5050 5050 | 03N/01W-05K01 | H | 61.0F 16.1C | 6.3 | 150 | -- | -- | -- | -- | -- | -- | -- | 15 | -- | -- | -- | 40 | | | |
| 09/25/73 1100 | 5050 | 03N/01W-18A01 | H | 62.0F 16.7C | 7.4 | 450 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 09/25/73 1300 | 5050 5050 | 03N/02W-32001 | H | 55.0F 12.8C | 7.1 | 1300 | 31 | 35 | 182 | 3.9 | 0 | 231 | 32 | 286 | 2.9 | .00 | -- | 706 | | | |
| | | | | | | | 1.55 | 2.88 | 7.92 | .10 | .00 | 3.79 | .67 | .07 | .05 | -- | 686 | 221 | | | |
| | | | | | | | 12 | 23 | 64 | 1 | 30 | 5 | 5 | 64 | | | 32 | 5.3 | | | |
| 1-11 ROUND VALLEY | | | | | | | | | | | | | | | | | | | | | |
| 09/18/73 1000 | 5050 | 22N/12W-06L02 | H | 58.0F 14.4C | 7.4 | 395 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 09/18/73 1100 | 5050 5050 | 22N/12W-19F01 | H | 60.0F 15.5C | 6.9 | 460 | 30 | 39 | 13 | .5 | 0 | 287 | 28 | 3.2 | 2.3 | .00 | -- | 248 | | | |
| 09/18/73 1020 | 5050 5050 | 22N/13W-01J03 | H | 60.0F 15.5C | 7.3 | 220 | -- | -- | -- | -- | -- | -- | -- | 3.9 | -- | -- | -- | 97 | | | |
| 09/18/73 1040 | 5050 | 22N/13W-13A01 | H | 60.0F 15.5C | 6.9 | 235 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 09/18/73 0835 | 5050 | 23N/12W-33L03 | H | 62.0F 16.7C | 7.2 | 625 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 09/18/73 0855 | 5050 | 23N/13W-25P01 | H | 59.0F 15.0C | 7.7 | 250 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 09/18/73 0915 | 5050 | 23N/13W-36P03 | H | 63.0F 17.2C | 6.9 | 255 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 1-12 LAYTONVILLE VALLEY | | | | | | | | | | | | | | | | | | | | | |
| 09/18/73 1310 | 5050 | 21N/15W-01L02 | H | 64.0F 17.8C | 7.4 | 430 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 09/18/73 1250 | 5050 5050 | 21N/15W-12M02 | H | 63.0F 17.2C | 100 | 84 | -- | -- | -- | -- | -- | -- | -- | 3.7 | .0 | -- | -- | 30 | | | |
| 1-13 LITTLE LAKE VALLEY | | | | | | | | | | | | | | | | | | | | | |
| 09/18/73 1405 | 5050 | 18N/13W-08L01 | H | 62.0F 16.7C | 205 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |

TABLE E-1 (Cont.)
MINERAL ANALYSES OF GROUND WATER

| DATE TIME | SAMPLER LAB | TEMP FIELD PH | FIELD LABORATORY EC | MINERAL CONSTITUENTS IN CA HG NA K CO ₃ HC ₀₃ SO ₄ CL NO ₃ | | | | | | MILLIGRAMS PER LITER PERCENT REFRACTANCE VALUE | | MILLIGRAMS PER LITER TDS TH SI02 SUM NCH SAR | | | | | | |
|---|----------------|---------------------|---------------------------|---|----|----|-----|----|------|---|-----|--|----|--|--|-----|--|--|
| | | | | MILLIEQUIVALENTS PER LITER | B | F | TDS | TH | SI02 | SUM | NCH | SAR | | | | | | |
| <hr/> | | | | | | | | | | | | | | | | | | |
| 1 1-13 NORTH COASTAL REGION LITTLE LAKE VALLEY | | | | | | | | | | | | | | | | | | |
| 18N/13W-20H03 | M | | | | | | | | | | | | | | | | | |
| 09/18/73 | 5050 | 58.0F | 23S | -- | -- | -- | -- | -- | -- | 5.9 | 2.8 | -- | -- | | | 102 | | |
| 1440 | 5050 | 14.4C | 226 | | | | | | | .17 | .05 | | | | | | | |

Appendix F, "Waste Water Data", which appeared in certain volumes of the Bulletin No. 130 series, has been discontinued. For information regarding waste water, the reader is referred to the recently reactivated Bulletin No. 68 series: "Inventory of Waste Water Production and Waste Water Reclamation Practices in California".

